

HOUSING FOR TORONTO 1947

by

HUMPHREY CARVER

with the assistance of

ROBERT ADAMSON

TORONTO METROPOLITAN HOUSING RESEARCH PROJECT
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FOREWORD

On the subject of Housing much has been written over a period of many years in many different languages. In our own community are contractors, social workers, realtors, architects, officers of mortgage companies, carpenters, welfare officials, industrialists, engineers, politicians and many others who each view the housing problem from the point of view of their particular skill or calling. Experts qualified in many fields have contributed their special knowledge. There is consequently nothing very new that can be said about housing in general and there is little about our own local situation which is not already familiar to many. However there is a real need to view a community's housing problems as One Whole rather than as a number of isolated phenomena. There are the subjects of Prefabrication, Emergency Housing, the Housing Market, Rental Subsidies, Community Planning, Construction Costs, Slums, Home Ownership and many other specialised topics. How do they fit together and what is their relationship to one another? Vigorous and constructive policies are only likely to be pursued when there is a broad comprehension of the relationship that exists between the many facets of the whole problem. No one group of technical people can alone solve the problems of housing. The architect must seek the help of the legislator, the industrialist must respect the skills of the tradesman, the realtor must recognise the function of the social worker - and all must appreciate the predicament of the housewife and her family who ultimately pay for the

failures of all of us. If this study is of any value it is in the attempt to place in relationship with one another the principal areas of knowledge and practice associated with housing and to place these against the background of metropolitan Toronto.

C O N T E N T S

	Page
I A DECENT HOME FOR EVERY FAMILY	1
(1) The Conception of a Housing Programme	1
(2) Housing and Health	8
II HOUSING PROGRAMME FOR METROPOLITAN TORONTO	16
(1) The Number of Houses Needed	16
(2) The Number of Replacements Needed	20
(3) The Disposition of New Housing	30
(4) The Progress of the Housing Programme	37
III HOUSING COSTS	43
(1) The Cost of a 5,000 Unit Annual Programme	43
(2) The Components of Housing Costs	45
(3) The Components of Construction Costs	54
(4) The Nature of the Building Industry	60
IV THE COMMUNITY'S CAPACITY TO PAY FOR HOUSING	69
(1) Distribution of Income	71
(2) Proportion of Income Spent on Housing	73
(3) Rents and the Family Budget	78
(4) The Social and Economic Framework of a Programme	89
V HOUSING SUPPLY	95
(1) Theory of the Housing Market	95
(2) Subsidies to Supplement the Market	102
(3) The Local Housing Authority	113
VI THE ULTIMATE HOUSING PROBLEM	121

TABLES

TABLES IN THE TEXT

	Page
A. Value of Residential Construction Contracts. January - May 1945, 1946, 1947	38
B. Gross Monthly Cost of a \$7,000 Housing Unit	45
C. Monthly Cost of \$7,000 Unit to Owner-occupant	46
D. Prices of Lots for Houses on NHA Loans Toronto metropolitan area 1946	49
E. Cash Contributions of Borrowers on NHA Loans Toronto metropolitan area 1946	51
F. Costs of Constructing representative types of dwelling Toronto area January 1947	58
G. Labour Cost as percentage of value of various classes of manufactured products	63
H. Monthly Costs of maintaining standard of living set by Toronto Welfare Council 1941, 1944, 1947	82
J. Annual Incomes required to support families at Toronto Welfare Council's standard of living	84

T A B L E S F O L L O W I N G T H E T E X T

1. Relationship between Health and Housing Conditions
Toronto 1934
2. Costs of Municipal Services, Good and Poor Housing Areas
Toronto 1946
3. Recorded changes in Health of Populations moved
from slum conditions to modern Housing
4. Increases of Population and Housing
Toronto metropolitan area 1931 - 1945
5. Sub-standard Dwellings in Canadian Cities
As recorded by 1941 Census
6. Progress of Housing Programme
Toronto metropolitan area 1931 - 1946
7. Costs of Building Materials and of Living
Canada 1945, 1946, 1947
8. Value of Residential Construction in relation with all
other forms of Construction. Toronto area 1934 - 1946
9. Types of Residential Construction built in the
Toronto Metropolitan area 1945 and 1946
10. Types of Construction used in Housing built in
Toronto metropolitan area 1945 and 1946
11. Cost of constructing representative house of wood frame
and siding. Toronto area, January 1947
12. Cost of constructing representative house of solid brick.
Toronto area, January 1947
- 13 (A). Component Costs of Constructing Dwellings
Assuming Materials: Labour: Overhead = 50: 35: 15
- 13 (B). Component Costs of Constructing Dwellings
Assuming Materials: Labour: Overhead = 52.5: 27.5: 10
14. Distribution of Incomes
Toronto metropolitan area, 1941
15. Estimated Distribution of Income-Taxpayers
Ontario, 1946

(continued)

TABLES FOLLOWING THE TEXT (continued)

16. Rent Capacity of Families
Toronto metropolitan area, 1941
17. Rents paid by low-income families compared with theoretical capacity. 12 Canadian cities
18. Rents paid by middle-income families compared with theoretical capacity. 12 Canadian cities
19. Monthly Rents paid, in relation with family size and income
Toronto city and suburban areas
20. Percentages of tenant families paying excessive rents.
Three income levels and family sizes. Toronto area
21. Monthly Budget for Family of Five in Toronto.
Toronto Welfare Council standard of living.
22. Net Family Incomes after deduction of Income Tax and
addition of Family Allowances.
23. Net Monthly Rent Capacity as One Fifth of Net Income,
Standard of Living margin and residual Rent Capacity
24. Families in Toronto metropolitan area
Percentage Frequency by Income and size, 1941
25. Families in Toronto metropolitan area
Frequency Distribution of 200,000 families
26. National Income, Building Costs and Volume of Residential
Construction in Canada 1919 - 1941
27. Examples of Rent Systems used by Local Housing Authorities.
Chicago and Newark, N.J.

CHAPTER I

A DECENT HOME FOR EVERY FAMILY

1.

The Conception of a Housing Programme

On every continent and in every city families are anxiously looking for better places in which to live. As we approach the middle of the twentieth century the shortage of houses is a world-wide phenomenon.

During the nineteen-thirties the tide of economic insecurity and apprehension discouraged people from building houses and then, for six years, the skills of men were everywhere enlisted for purposes of destruction. But through wars and economic depressions the human race has continued stubbornly to multiply. Now, hungry for an interval of peace and stability, the people start again to build the houses that they must have for the raising of a new generation.

Canada no less than other countries has suffered from the diversion of its constructive energies. It is, however, privileged in having emerged from the war with its cities intact. In Great Britain, between 1939 and 1945, 200,000 houses were destroyed and another 250,000

made uninhabitable by enemy action. The USSR is said to have lost six million dwellings and the destruction of houses in Germany is beyond calculation. In Canada, the unprecedented pressure placed upon our housing accommodation does not originate in the absolute loss of dwellings but has been brought about by the vigorous growth of the population; between 1939 and 1945, while labour and materials were diverted from home-building, marriages took place at the record average of 113,000 a year as compared with an average of 75,000 a year during the previous decade.

The shortage of houses with which Canada was to be faced after the war was not altogether unforeseen. A committee appointed by the Federal Government in 1943 forecast the situation in remarkably accurate terms. As the Minister of Reconstruction and Supply stated in the House of Commons in July 1946:

The Advisory Committee on Reconstruction in its ^{*} report, commonly known as the Curtis Report, indicated that the desirable housing programme for the first ten years following the conclusion of the war would be 700,000 units or 350,000 units for a five-year period. But this estimate does not take account of all the doubling-up which we are experiencing and a desirable vacancy rate needed to assure flexibility in our housing supply. If account of these additional factors is taken, we estimate that we should build some 480,000 units during the five years ending March 1952. About 80,000 units should be built during 1947-48 and 100,000 in each of the following years.

This was a gigantic task for a country which had never before built more than 50,000 housing units in a year and during the ten pre-war years had constructed an average of only 26,000 dwellings a year. In fact in some respects Canada had to embark upon its post-war housing programme at a greater disadvantage than either Great Britain or the United States; for

* Advisory Committee on Reconstruction, IV. Housing and Community Planning, (Ottawa, King's Printer, March 1944).

it had allowed its residential construction industry to languish and our production plant and force of building tradesmen had declined far below the normal needs. Between 1921 and 1939 the United States had built nearly ten million houses, or the equivalent of 75,000 for each million of its population. In the same period Canada had built 581,000 dwellings or the equivalent of only 50,500 for each million of its population. While during those years Great Britain had recorded a remarkable achievement, having constructed more than three and a half million dwellings, or the equivalent of 83,000 units for each million of its population. Furthermore Great Britain had stepped up her production consistently from year to year and reached the peak during the years immediately preceding the war. The peak of Canadian production had been in 1928, since when it had dropped to a mere 14,400 units in 1933 and in 1939 was only limping slowly back into full activity. There had been little encouragement for the younger generation to enter the trades and professions associated with such an apparently vulnerable business. The fact is that the skills, arts and sciences of domestic architecture and community planning had been dormant in Canada for a generation. The process of building houses and planning residential areas was beset with time-worn practices and obsolete conventions.

As we enter a new period of history, with the housing shortage recognised as an outstanding social problem and the crucial test of our economic and technological skill, it is possible already to discern a most significant change in the public attitude to these problems. Without such a reorientation it might indeed be impossible either to modernise the process of building houses or to bring about a revival in the arts of domestic architecture and civic planning. This change of public attitude arises from the very nature

of the situation in which so many Canadian families have found themselves. The need for better housing accommodation has now been an experience shared by so many in all kinds of circumstances that we have come to think of housing as a matter of public concern requiring some kind of corporate action. Every community has had to make an inventory of its accommodation and has had occasion to appraise its stock of housing with a critical eye. The country's stock of housing has suddenly become a matter of profound personal interest to a very great number of people, for in 1946 the number of dwellings in Canadian cities was about 200,000 less than the number of families and a large proportion of those dwellings was very obviously in need of replacement. Post-war society has examined the housing which it has inherited from a previous generation and has found it to be inadequate both in quantity and quality. The public is therefore keenly interested to know how the necessary additions to the stock are to be made and by what means the process of replacement is to be affected.

This all-inclusive view of the nation's housing affairs provided a new background against which to work out plans for the future. Formerly the building of houses appeared to be a matter which directly concerned only those who could afford to buy a new house. But it has now become apparent that the building of new houses concerns very many more people than those who can actually afford to occupy one. For the great bulk of our existing stock of housing we are indeed indebted to the enterprise and initiative of the original purchasers but we now perceive that they were but agents in the process of creating the community's stock of housing and that the ownership of a house is but a passing phase in its service to the community. The fact is that

more than half of our urban households do not live in houses that they own and five years is about the average length of time each household stays in a dwelling. Our older houses have now had several generations of use and 60 per cent. of all urban housing in Canada is now more than a quarter of a century old and was built according to standards accepted before the first Great War. Each dwelling in a community's stock of housing passes through many ownerships and serves many families during its useful lifetime. As we begin to perceive this process it becomes clear that the community as a whole, on behalf of all its members, has a direct interest in the building up of an adequate quantity of housing and in the achievement of a high quality of design.

This realisation of the whole comprehensive range of housing affairs is reflected in the policies of our national and local governments. There is introduced for the first time upon the Canadian scene the concept of a housing "programme", arising out of the need to measure our shortages and deficiencies and the consequent formulation of plans for their rectification. This in turn implies the setting of certain standards of achievement for such a programme. Have we not now come to assume that the provision of a separate dwelling for every family is a national objective? Perhaps there has been no official declaration of such a governmental policy and yet the whole philosophy of the *Curtis Report and the subsequent efforts of the Dominion Government to plan a production programme inevitably imply such an intention. And if "a separate dwelling for every family" is accepted as an objective of national policy, does it not then become necessary to

* Ibid.

define some standards by which to measure the quality of such dwellings? For there would be little effectiveness in a policy which sanctioned the use of an unhealthy slum or shack even if it could be technically described a "separate dwelling". So by an inescapable logic the concept of a housing "programme" leads to an acceptance of the view that such a programme can only be said to have reached fulfilment when every family has been placed in a separate dwelling of decent quality. It then becomes evident that the critical portion of a nation's housing is in the areas of slums and sub-standard dwellings. It is the ultimate aim of a total housing programme to raise the worst-housed families to that level of decent living which we hope to accomplish for everyone in the Dominion of Canada.

The definition of a nation's ultimate housing objective is an essential preliminary to the provision of the necessary legislation and the establishment of administrative organisations for reaching that objective. The General Housing Bill recently presented to the U.S. Congress (and commonly known as the Wagner-Ellender-Taft Bill) is described as "A Bill to establish a national housing policy and provide for its execution;" the first few lines of the preamble are as follows:

The Congress hereby declares that the general welfare and security of the Nation and the health and living standards of its people require a production of residential construction and related community development sufficient to remedy the serious cumulative housing shortage, to eliminate slums and blighted areas, to realise as soon as possible the goal of a decent home and a suitable living environment for every American family and to develop and redevelop communities so as to advance the growth and wealth of the Nation.

A somewhat similar expression of aims was made in the British Government's White Paper of March 1945 setting out the nation's housing programme of the post-war years. Three objectives are stated:

The Government's first objective is to afford a separate dwelling for every family which desires to have one. For this purpose it is estimated that some three quarters of a million dwellings are needed.

The second objective is to provide for the rapid completion of the slum clearance and overcrowding programmes which were already in course of execution before the war. To remove houses already condemned as unfit and to abate overcrowding condemned since 1935, a further half million houses are needed.

The long-term objective of the Government is to secure a progressive improvement in the conditions of housing in respect both of standards of accommodation and of equipment, and to attain this objective by a continuous programme of new building. This continuous programme must include provision year by year for any increase in the number of separate families, the needs which arise out of redistribution of the population, and the replacement of obsolescent houses.

These categorical statements of housing policy must be compared with the somewhat limited objectives implied in the description of Canada's operating housing legislation, the National Housing Act, 1944 which is described as "An Act to Promote the Construction of New Houses, the Repair and Modernisation of Existing Houses, the Improvement of Housing and Living Conditions, and the Expansion of Employment in the Postwar Period."

At the beginning of this study of Housing it is necessary to raise the question of ultimate objectives because, unless these are defined, the problem cannot be clearly presented nor solutions intelligently discussed. To keep supplying enough houses to satisfy the effective demand of those who can afford to occupy new accommodation, either as owners or tenants, is obviously a task of far less magnitude than to supply enough houses to fulfil the needs of every family in the community. The former task may be accomplished through the normal economic functioning of Supply and Demand. The latter task presents a problem of Supply and Need, the solution to which must require procedures of an entirely different kind, involving the implementation of policies based on concepts of social justice and community welfare.

Housing and Health

The reasons for believing that every family and household in the Dominion of Canada should have the opportunity of living in a separate dwelling of reasonable size and character may seem too self-evident to require substantiation. The sciences and arts of civilisation have, throughout historical time, been focussed upon the building of towns and cities and homes in which men have thought that they would be able to live a more free and healthy life, insulated against the weather and against disease and sickness and against the intrusions of other people. The surface of the earth is littered with the ruins of man's successive attempts to build for himself more secure, more comfortable, more labour-saving and more sanitary places to live in. This seeking after a healthy way of living has always been one of the ulterior objectives and stimulating forces in society. But however reasonable and self-evident this objective may be, some rational explanation seems necessary in order that a national housing policy may be clearly formulated and vigorously executed, not on account of sentiment or some dimly perceived mission but for reasons that can be scientifically demonstrated. What measurable benefit would accrue to the community as a whole as the result of supplying such a volume of good housing that the worst housing could be taken out of circulation?

The simple answer to this question is that a direct relationship exists between Health and the physical conditions under which people live. The fundamental reason for regarding Housing as a social service

requiring governmental direction, is the acceptance by our society of a corporate responsibility for the health of all its members. In one way or another we have come to regard this responsibility as a measure of material self-protection; in order that we should reproduce ourselves and work together effectively as an economic unit we must see that all members of our society are properly fed and decently housed and provided with the modest pleasures and artistic fancies that make life worth living.

It may seem superfluous to elaborate on this theme when so many families in this community are suffering acutely from the humiliations, insecurities, conflicts and all kinds of sickness both mental and physical which accompany a shortage of decent housing accommodation. Though it is not the purpose of this study to catalogue the varieties and amount of ill-health which are being originated and intensified by the present housing situation yet the daily and hourly existence of these human tragedies up and down the streets of Toronto must be regarded as the background of all that follows.

To each individual in the families affected the problem is a personal one. To the mother it is the bitterness of having to bring up children without a home of their own - in a crowded room in someone else's house, without proper equipment, without any apparent prospects of getting established and continually pursued by fears of being evicted. Under such conditions the common minor problems of sickness and family discipline begin to assume fearsome proportions. For the father there is the nagging sense of responsibility for finding an escape from a situation beyond his control and the threat that the failure to establish a home will necessitate a separation of the family. For the children, sensitive to the insecurity

and irritations of their parents, there is an urge to escape from home rather than meet disappointments there; particularly for the 'teen-age children is there a humiliation in the circumstances and an inability to find the privacy so urgently needed for the development of their individualities. It is from such a background that there emerge the manifold health problems with which the community's social agencies have to deal; these agencies find that the present housing situation is the principal factor in the problems with which they are presented.

It is obvious that a family is likely to be most healthy when it is living in a house that is easy to keep clean, that can be maintained at a desirable temperature, that provides some privacy for each individual and a generally stimulating atmosphere of light and colour. Yet, curiously enough, very little scientific investigation has been directed at these environmental factors in a health programme. There is, however, a gradually accumulating body of evidence of a negative kind, showing that there is a measurable relationship between poor health and poor housing. In the City of Toronto this was first clearly established as long ago as 1934 by the Lieutenant Governor's Committee on Housing Conditions in Toronto and published in what is generally known as * "The Bruce Report". In reviewing the housing problems of this post-war period no apology is needed for recalling this important evidence from the nineteen-thirties, which is briefly summarised on TABLE 1. The Bruce Report is for the people of Toronto an important and classic document which laid the foundation of what may be

* Report of the Lieutenant Governor's Committee on Housing Conditions in Toronto, (Toronto, 1934).

described as our housing philosophy. It clearly demonstrated the inevitable association of ill-health with poor housing. Though much has happened during the intervening decade, though there have been great changes in social and economic conditions, yet the same poor housing is still with us. But now it is overcrowded and even more intensively used.

Similar records have been obtained from many other metropolitan cities in Canada, the U.S. and Great Britain showing that the close relationship between health and housing conditions is a universal phenomenon. It has been demonstrated furthermore that these characteristics of a poorly housed population represent a financial load upon the taxpayers of the whole community since the poor housing areas which require the most expensive health and welfare services contribute the least to the revenue of the municipality. A survey was recently made of the City of Toronto's annual expenses in servicing two districts of approximately equal size, the Regent Park district of inadequate housing and a typical neighbourhood in the north end of the city; the survey revealed the fact that the Regent Park district cost the city \$95,000.00 for public services and only returned a revenue of about \$32,000.00 (a deficit of \$63,000.00) while the area in north Toronto cost the city less than \$20,000.00 for public services and returned a revenue of about \$83,000.00 (representing a net gain of \$63,000.00). (TABLE 2).

Now it must be confessed that there is a certain weakness in most statistical presentations offered as evidence that poor housing conditions are really the cause of poor health and other forms of social disability which are a burden to the community at large. It is certainly not difficult to demonstrate that poor health and other expensive pathological characteristics are commonly found in association with poor housing but it

is not so easy to prove that they are related as cause and effect. Is it not possible, it is sometimes asked, that the high incidence of mortality, disease and delinquency found in slum areas should really be attributed to the general conditions of poverty and incomplete education that characterise those areas? People who cannot afford to pay very much for their housing naturally gravitate into slums and other areas where the lowest rents are charged. Perhaps the same characteristics which make people ineffective in earning a living also render them ineffective in dealing with problems of physical and mental health in their families. It may be argued that this relative ineffectiveness in a certain section of the community would cause about the same morbidity rates whether that particular population were housed in good or in bad conditions. In fact the only way to give scientific proof of the causative relationship between Housing and Health is to examine the effects of moving a specific group of people out of poor housing conditions into good housing conditions. Unfortunately there has not been an opportunity to conduct such a controlled experiment in Canada and we are therefore compelled to rely upon the evidence of experiments that have been conducted in Great Britain and the United States. Each of these countries has been able to provide well-authenticated studies made in the process of re-housing the populations of slum areas. Each of the four groups, whose health records are shown on TABLE 3, evidently underwent an improvement as the direct result of the change of environment. It is noticeable, however, in the two English groups studied, that in no case did their health records improve to such an extent that they were raised to the average standard of the whole city. Perhaps the period of observation was not sufficiently long to allow the full benefits of re-housing to take effect. But it may also be allowed that these

particular population groups were not as inherently healthy as those in other parts of the city which had enjoyed over the previous years better living conditions of all kinds - nutritional, environmental, educational and occupational. It is generally conceded that the full benefits of improved housing are not immediately found in the adult population who cannot react immediately to new conditions; the full benefits of good housing are brought to bear on the child population and the real extent of these benefits could only be properly measured over a lifetime. In this connection it is interesting to observe that studies have recently been made in the United States showing a relationship between poor housing and personality and mental disorders; it was found that Army rejection rates for personality defects were one and one half times as great for young men recruited from certain slum areas as compared with men from good housing areas.*

In analysing the positive relationship between Housing and Health the Committee on the Hygiene of Housing set up by the American Public Health Association has enunciated thirty basic principles** grouped under four broad headings: Fundamental Physiological Needs, Fundamental Psychological Needs, Protection Against Contagion and Protection Against Accidents. Since the provision of housing is not an end in itself but is to be regarded rather, as the means of promoting a healthy way of life it may be well to adopt these thirty basic requirements as the real objective of a housing programme.

* E. E. Hadley et al: "Military Psychiatry, an ecological note".
Psychiatry, 7: 379 (November 1944)

** Basic Principles of Healthful Housing, ed. 2, New York,
American Public Health Association, 1941.

Fundamental Physiological Needs

1. Maintenance of a thermal environment which will avoid undue heat loss from the human body.
2. Maintenance of a thermal environment which will permit adequate heat loss from the human body.
3. Provision of an atmosphere of reasonable chemical purity.
4. Provision of adequate daylight illumination and avoidance of undue daylight glare.
5. Provision for admission of direct sunlight.
6. Provision of adequate artificial illumination and avoidance of glare.
7. Protection against excessive noise.
8. Provision of adequate space for exercise and for the play of children.

Fundamental Psychological Needs

1. Provision of adequate privacy for the individual.
2. Provision of opportunities for normal family life.
3. Provision of opportunities for normal community life.
4. Provision of facilities which make possible the performance of tasks of the household without undue physical and mental fatigue.
5. Provision of facilities for maintenance of cleanliness of the dwelling and of the person.
6. Concordance with prevailing social standards of the local community.

Needs for Protection against Contagion

1. Provision of a water supply of safe sanitary quality, available to the dwelling.
2. Protection of the water supply system against pollution within the dwelling.
3. Provision of toilet facilities of such a character as to minimise the danger of transmitting disease.

4. Protection against sewage contamination of the interior surfaces of the dwelling.
5. Avoidance of insanitary conditions in the vicinity of the dwelling.
6. Exclusion from the dwelling of vermin which may play a part in the transmission of disease.
7. Provision of facilities for keeping milk and food undecomposed.
8. Provision of sufficient space in sleeping rooms, to minimise the danger of contact infection.

Needs for Protection against Accidents

1. Erection of the dwelling with such materials and methods of construction as to minimise danger of accidents due to collapse of any part of the structure.
2. Control of conditions likely to cause fires or to promote their spread.
3. Provision of adequate facilities for escape in case of fire.
4. Protection against danger of electrical shocks and burns.
5. Protection against falls and other mechanical injuries in the home.
6. Protection of the neighbourhood against the hazards of automobile traffic.

CHAPTER II

* PROGRAMME FOR METROPOLITAN TORONTO

1.

The Number of Houses Needed

Metropolitan Toronto consists of the city itself and the twelve surrounding suburban municipalities. Though the residential areas of the city and its suburbs are continuous and merge into one another, yet there are certain distinctive features of the city's housing accommodation: for, while the suburbs are largely built up with single family dwellings, 60 per cent. of the housing within the city itself is in the form of buildings containing more than one dwelling unit. Some of these are apartment houses designed for that purpose, but a great number are the large three and four floor houses built early in the century when the average household was twice as large as it is to-day and required 10 or 11 rooms for its accommodation. (At the turn of the century the average Canadian household contained more than five persons; the average size of the Toronto family is now 3.8.).

* A more detailed discussion of Toronto's post-war housing shortage and the statistical evidence for the figures used in Sections 1 and 2 of this Chapter are given in the author's previous report: Humphrey Carver, How Much Housing Does Greater Toronto Need? (Toronto Metropolitan Housing Research Project, May 1946)

The inheritance of these solid brick houses from a previous generation, many of them handsome examples of Victorian and Edwardian architecture, has proved invaluable during the recent pressure of the housing shortage. By converting them for the use of two or three or more families the city has been able to absorb an increased population for which no new housing was built. This process has been taking place particularly over the last fifteen years until, room by room, the housing accommodation of the city has become saturated.

Between 1930 and 1945 there were 27,815 dwelling units built in the suburban municipalities to house the increase of 103,320 in the population which took place during those years; in other words a new dwelling was provided for each additional 3.75 persons. But during the same period the population of the city itself increased by 60,278 while only 8,052 new dwelling units were built, or one for each 7.48 persons. From these facts there emerges the picture of an increasingly overcrowded city able to spill its surplus population into the suburban areas only as fast as new housing was constructed there. Overcrowding, up till the end of the war, was confined largely to the city itself and population had moved into the suburban fringe in direct proportion with the amount of accommodation provided there. A study of this situation indicates that at the end of the war there was already an absolute shortage of about 8,000 units in the city.

It was in these already somewhat critical circumstances that there was now unloaded upon the city's overtaxed housing accommodation the entire force of demobilised service men. Between August 1945 and February 1946, 24,000 men returned to the city itself and about 12,000 returned to

their homes in the suburbs. About half of them were single men who went to live in their parents' homes, about one fifth of them already had homes and families of their own, a few had no place to go. And about a third of these veterans had wives waiting for them, but because they had been married during the war years, they had never been able to set up homes of their own. To the previous shortage of 8,000 units, there was consequently added a further immediate need for about 10,000 units, making an absolute shortage in the Toronto metropolitan area of about 18,000 housing units.

Though the lack of adequate housing accommodation might be expected to exercise some restraining influence upon the formation of new families, yet the biological urges of nature are hard to restrain and young people are naturally optimistic. In an expansive and confident mood, stimulated by a successful military and industrial participation in the war, it seems inevitable that Canadian cities are going to increase in population vigorously in spite of the inconveniences of inadequate accommodation. During the last census decade (1931 - 1941) the city's population increased by 4.5 per cent. while the population of the suburban areas increased by 30 per cent. If this rate of growth were to be repeated in the post-war decade a population of 30,000 would be added to the city and nearly 80,000 to the suburban municipalities making a total increase of 110,000. Unless there should be some serious economic collapse or other kind of disaster it seems hardly likely that metropolitan Toronto will fail to grow more rapidly under the present stimulating conditions than it did during the relatively discouraging pre-war years. An increase of 110,000, assuming an average of 3.8 persons per household, would represent the need for 29,000 additional housing units to be constructed during the next ten years. It

should be observed furthermore that the need for houses is related with the numbers of adults in the population rather than with the total population figures; since present trends in the age composition of the population show a proportionately larger number of adults it is likely that estimates of the need for housing units will prove to be understated rather than exaggerated. There will probably be a need for a larger number of smaller dwelling units.

If, during the ten post-war years, there were constructed in the Toronto metropolitan area 18,000 dwellings (to make up the housing shortage) and 29,000 dwellings (to provide for the increase of population) then, if our estimates and calculations are correct, there should be approximately one dwelling unit available for each family and household, or about 257,000 units in the whole area. This would not, however, add quite sufficient accommodation. For in any community the number of dwelling units must exceed the number of households by a reasonable margin in order to provide for flexibility of movement as family groups are redeployed under changing circumstances. There must be an adequate number of vacancies in the stock of housing or else the normal process of movement could not take place. It is commonly regarded as desirable that the vacancy rate for single-family dwellings should be 2 per cent. and for apartments 6 per cent. Even if the minimum proportion of vacancies were regarded as adequate it would be necessary to provide 5,000 housing units (2 per cent. of 257,000) in addition to the need already estimated, raising the whole ten year programme to 52,000.

The Toronto metropolitan community is thus faced with the task of constructing houses at the rate of more than 5,000 units a year for at

least a ten year period. This represents a volume of production twice as great as the average 2,400 units a year built during the period 1931 - 1945. During 1945 3,458 units were completed in the area and in 1946 4,447. Since this rate is little more than sufficient to keep pace with the growth of the population it is evident that during 1947 and subsequent years the volume of production will have to be greatly intensified.

2.

The Number of Replacements Needed

A community's stock of housing is in a continuous process of deterioration and obsolescence. Houses, like clothes and furniture and cars, not only wear out through continued use and exposure to the weather but also cease to fit the needs of the people as ways of living change. As older houses come into the possession of families whose economic circumstances make it more difficult for them to contribute towards the increasing costs of maintenance, the process of physical deterioration is accelerated. At the same time older houses come to be occupied by families whose ways of living are further removed both in time and social status from those for whom they were originally designed.

The City of Toronto is now entering an age of maturity when its internal parts, constructed half a century ago, no longer meet contemporary requirements. Since the incorporation of the city in 1836, the community has been busy growing and adding to its total stock of housing accommodation. With the need to start replacing obsolete housing we enter upon an entirely new phase of civic business, requiring procedures for which there are yet

no precedents in Canada. The industrial cities of Great Britain reached this stage of maturity some time ago and are therefore further advanced in their experience of replacing obsolete housing. The United States had already started on this process before the war through the instrumentality of the United States Housing Act 1937 and the Federal Public Housing Agency; American cities are now faced with the necessity for extensive measures of urban redevelopment for which new legal and administrative powers are now being formulated.

In the ten year period since 1936, 1,712 dwellings have been demolished in the City of Toronto, or about 1.15 per cent. of all the dwellings in the city. At this rate it would take more than a thousand years to retire the existing stock of housing accommodation in metropolitan Toronto.

Two factors have enabled the city so long to postpone the process of replacement. During the age of steam power the characteristic form of urban growth was internal expansion thrusting out from the core of the city. Almost as fast as the interior residential areas of the city became obsolete they were overtaken by the internal expansion of commerce and industry. The problem of residential replacement largely solved itself as old dwellings were demolished to make way for new commercial buildings or former residences were adapted for business and institutional purposes. This process still continues to some degree along the main mid-town arteries such as Bloor, Bay and College Streets. But, in general, this convenient method of replacement has ceased to be effective because industries are no longer tied to the city's central unloading point for coal and freight. The adult metropolis has germinated new industrial nuclei such as Leaside, Weston and New Toronto; the flexibility of road transport and electric power have

made suburban locations preferable to central sites. The very size of the city has made it more convenient for employees to work in these decentralized industrial areas than to travel to the down-town centre or live in the older and more congested neighbourhoods. And so the interior areas, without the spontaneous process of industrial expansion and replacement, have become stagnant; their sombre buildings have become an increasingly embarrassing inheritance with property-owners fighting a strenuous rear-guard action to squeeze out of them the last remaining values. The original home-owners of the last century have long since given place to owners of converted rental housing; in many cases the titular owners have little to do with their properties personally and have placed those declining assets under the impersonal management of real estate firms and trust institutions.

It has been possible also to postpone the systematic process of replacement because the large family homes of a previous generation could be quite conveniently converted into lodging houses, apartments and duplexes of which a certain stock was required. These houses had been substantially built for the more prolific families of the nineteenth century and their big high-ceilinged rooms certainly had a spaciousness which the modest six-room house of the last three decades has not been able to offer. We may sometimes regret that the bricklayers and stonemasons of that period practised their crafts so conscientiously, for the ponderous Victorian architecture of early Toronto has been too long with us. These awkward mansions have, however, been able to absorb an increase of population during the present crisis so we may perhaps be grateful that their removal was so long postponed.

The 1941 census provided an opportunity for appraising the

housing accommodation of the Canadian people. The condition of Toronto housing did not appear in an altogether favourable light, as can be seen in this summary:

(a) Dwellings requiring external repairs	18,608
(b) Dwellings that either had no flush toilet or only the shared use of one	24,047
(c) Dwellings that either had no bathtub or shower or only the shared use of one	26,624
Dwellings with condition (a) and/or (b) approximately	37,000
Dwellings with condition (a) and/or (b) or (c) approximately	42,000

Since Toronto is a thriving city containing a large proportion of comparatively modern houses occupied by people with secure incomes it was to be expected that its housing would, as a whole, compare favourably with that of other cities. Measured by the uniform yardstick used in the 1941 census it is evident that many communities have a higher percentage of sub-standard dwellings, notably Quebec City, Edmonton, Regina and Saint John, N.B. But the 42,000 sub-standard dwellings recorded in the Toronto area, nearly 30 per cent. of the total stock of housing, reveals the extent of obsolescence and the great dimensions of the replacement task which must ultimately be undertaken. See TABLE 5.

During 1944 the Toronto City Planning Board made a special study of the city's residential areas and classified their condition under four headings:

- 16 per cent. of the residential areas were described as "sound"
- 32 per cent. of the residential areas were described as "vulnerable"
- 50 per cent. of the residential areas were described as "declining"

2 per cent. of the residential areas were described as "blighted". The Planning Board recommended that the "blighted" areas should be entirely rebuilt and pointed specifically to four areas which were designated "Redevelopment Areas".

	<u>Area</u>	<u>Population</u>
(1) Regent Park, North	42.2 acres	3,717
(2) Regent Park, South	64.7	3,647
(3) Yorkville	41.2	1,601
(4) Trinity Park	<u>52.6</u>	<u>7,569</u>
Total	200.7	16,534

Assuming that the average number of persons in each household within these areas is 4.3 (the average for the city as a whole), the number of dwelling units required to rehouse this population would be 3,845. The Planning Board recommended that by more economical use of the land the population of these areas could be raised to 20,921 requiring 4,872 units. The first step in this operation has been the approval given by the electorate on 1st January 1947 to the rebuilding of the Regent Park (North) area and the subsequent appointment of the Toronto Housing Authority in May 1947.

The provision of about 4,000 modern housing units in the "Redevelopment Areas" is, however, only a small part of the process of reconstruction which will have to be planned in order to restrain the continuous process of obsolescence with which the interior parts of the city are threatened and which has already caused 50 per cent. of its residential area to be classified as "declining". From these declining areas there is a continual flight to the suburbs which ultimately threatens the financial structure of the whole municipality. It is unthinkable that the

solid core of the city can be abandoned to such a wasteful decline. Some have been hopeful that the process of time itself would rectify this tendency towards internal deterioration but the current history of the big cities on the American continent seems to demonstrate that time aggravates rather than heals this process.

If we were to assume that henceforth Greater Toronto will have to undertake a continuous replacement of dwelling units as they reach the age of about 50 years, then the annual turnover of this operation would have to begin at the rate of about 1,000 units a year increasing to the rate of about 4,000 units a year at the end of a 50 year period (2 per cent. per annum of the present 200,000 dwelling units in the metropolitan area). The devising of legislative and financial machinery for accomplishing this task is undoubtedly going to be one of the major problems of urban government during the coming years. The principal difficulty lies in the fact that it is not sufficient merely to replace individual buildings, even if private investors were willing to sink their money in obsolescent districts. It is the whole character of these neighbourhoods which must be refashioned, for the growth of the city outwards from its central core has changed the whole function of the internal street system and the availability of open spaces. As the City Planning Board stated in its 1944 Report:

These areas require more than mere protective measures for their improvement and the operation of a Zoning By-law cannot alone do more than stabilize existing conditions which are not satisfactory. Living conditions and amenities, open space, freedom from heavy traffic in the streets, etc. have already become serious deficiencies which must be corrected. In order to bring these neighbourhoods up to a desirable standard for urban residential use, both public and private action will be necessary. Public action should of course precede private action, as only by public action can those conditions be treated which will encourage the private individual property owner to act on his own behalf.

The public action required may be of two kinds or two degrees which might be referred to respectively as Remedial Planning and Re-planning.

(1) Remedial Planning. Some declining neighbourhoods are not beyond recall and their vitality may be restored without much disturbance of the existing street plans and properties. By minor adaptations of the street system it may be possible to divert through traffic into main arteries and at the same time remove traffic hazards and create additional play areas. By integrating the improvement plans of the school authorities, the Parks' Department, the operation of the zoning by-laws and the activities of a neighbourhood citizens' association it may be possible to re-create a community and initiate a new spontaneous growth. A programme directed to this end has been proposed by the City Planning Board in a recent * message to the people. The success of such remedial planning would undoubtedly depend upon the vigour with which it was conducted and the recognition and support it was given by citizen groups. Unless the people concerned really believed that a neighbourhood could be revitalized it would not, in fact, be revitalized.

(2) Re-planning. Some declining neighbourhoods cannot be brought back to a desirable standard of residential use without a complete re-planning of the properties and some disturbance of the street system. These are characteristically in the districts of mixed land use to be found along the borders of main arteries. Almost the whole area south of Bloor Street between Bay Street and the Don River is in this condition.

* The Planning Board Reports to the Citizens, a four page leaflet issued in May 1947.

The act of rebuilding on any single individual property is in itself insufficient to stem the general process of decline. It therefore becomes necessary to assemble blocks of land of such proportions that the re-constructed area would assume an entity and character of its own. For such an operation public action is necessary in order to acquire by expropriation those parcels of land which could not be assembled by private interests. The authority for a municipality in Ontario so to assemble land is granted by the Planning Act 1946.*

For the purpose of a housing project a municipality, with the approval of the Minister, may (a) acquire land within the municipality; (b) hold land heretofore or hereafter acquired within the municipality; or (c) sell, lease or otherwise dispose of land so acquired or held for a nominal or other consideration to any person or governmental authority having power to undertake housing projects.

This provision makes it possible to assemble and re-plan one or more city blocks so that a new residential neighbourhood can be created, unconfined by the previous boundaries of lots and street lines. The assembly and re-planning of such land can be carried out whether the building is to be done by a public housing authority (such as is proposed for the Regent Park and other redevelopment areas) or whether the housing is to be constructed and operated by private interests. Private developers could not take up such land profitably for housing development unless the cost of land per dwelling unit was marked down to a level comparable with that of land in suburban areas where lots cost from 10 to 15 per cent. of the total cost of a dwelling unit. It is argued, however, that the municipality could ultimately profit from such a procedure of land acquisition even if the re-planned site were turned over to private developers for a nominal sum; it is said that the

* Statutes of Ontario 1946, Chapter 71, Section 16.

increased revenue which a municipality may derive by taxing the thus improved values of the land and buildings would ultimately compensate for the initial cost of land acquisition and clearance. This happy outcome would depend of course, upon the relationship between the cost of acquisition and the economic level of the occupants of the reconstructed area. It certainly seems unlikely that housing tenanted by middle and low income families could ever yield a tax revenue sufficient to pay off these costs of acquisition.

At the present time the economics of this process of internal reconstruction are exercising the minds of municipal authorities in every major city on this continent. To date no formula seems to have been conceived which would prevent the community as a whole from having to accept the financial loss that must accompany the re-development of obsolescent areas; re-development can only take place if there is a marking-down of the values that society has placed upon such land. This must perhaps be regarded as a normal charge for urban depreciation which has been omitted from our municipal bookkeeping during the previous historical period of city expansion. A question arises, however, as to the source of funds for meeting these costs. In the metropolitan community of Toronto there is obviously no logical reason why these costs should be carried by those who happen to hold property within the boundaries of the city itself; such a charge would in fact only create a vicious circle and accelerate the flight to the suburbs which is the original cause of the internal decline. It would be more logical, in fact, to regard this cost of urban redevelopment as part of the price that must be paid for spreading cities widely into marginal suburban land rather than developing their interiors intensively. But in practical terms there is no way in which these costs could now be charged to the whole group of

municipalities within the metropolitan area and it is inevitable that contributions must be sought from some senior government. The need for this source of funds is, indeed, already recognized in the * National Housing Act 1944, by provisions made specifically for the clearance of slum areas but which, in principle, apply to the larger process of urban redevelopment; the Federal Government offers to pay half the cost of land acquisition and clearance provided that the land is to be developed "in accordance with an official community plan" and provided the land is sold to a limited dividend housing corporation.

The administrative machinery by which this process of urban re-planning and redevelopment could be operated has yet to be devised. It may be necessary to create a public utility corporation or commission which would have the powers of expropriation and the delegated authority of the municipality to assemble land and dispose of it for housing purposes. Some American cities have already assigned this function to their local Public Housing Authorities and some have created Redevelopment Commissions for this purpose. This operation of land assemblage should be clearly distinguished both from the planning function of a Planning Board and the management

* National Housing Act 1944, Section 12.

"In order to assist in the clearance, re-planning, rehabilitation and modernization of slum areas or blighted or sub-standard areas in any municipality, the Minister may make grants to a municipality in order to assist in defraying the cost to such municipality of acquiring and clearing, whether by condemnation proceedings or otherwise, an area of land suitable as a location for a low cost or moderate cost rental housing project No grant made under this section shall exceed one half of the amount by which the cost of acquisition and clearance of the land exceeds the cost at which the land so acquired and cleared is sold for the purpose of constructing thereon a rental housing project, and no grant shall be made under their section unless the remainder of the excess is borne by the municipality or jointly by the municipality and the government of the province in which the municipality is situated."

function of a Housing Authority.

The administrative problems implicit in a programme of housing replacement have been touched upon briefly here simply in order to indicate the kind of agency which the municipality will have to develop in order to deal with an important phase of its housing programme. More will be said later of the functions of the Housing Authority which has already been established in Toronto.

3.

The Disposition of New Housing

Since there is virtually no land still left available for additional residential building within the boundaries of the city itself, almost all the additional housing required (as distinct from replacements) will have to be built in the suburban municipalities. There are now about 155,000 housing units in the city and about 56,000 in the suburban areas; the addition of 50,000 units to the suburban municipalities which may take place during the post-war decade will therefore practically double their present accommodation and raise their population to almost two-thirds of that within the city itself. This represents an entirely new balancing of the domestic economy of the whole metropolis and introduces administrative and planning problems on a major scale. The present services, streets, and community plant of the twelve suburban municipalities have to be developed for the reception of a population twice the size of that for which present services exist. There is now little improved and serviced land still available and new capital is required for preparing building land. Recent

amendments to the National Housing Act 1944 have been aimed to draw the funds of the Insurance Companies into this venture.

In the first attempt to visualize the dimensions of the housing shortage and the consequent size of the housing programme which must be planned for the post-war years, great emphasis has been placed upon the number of houses. We are told that Canada must produce 80,000 houses in 1947 and 100,000 in subsequent years. We have ourselves calculated that Toronto needs to build about 50,000 additional houses in the next ten years. But these purely quantitative estimates do not convey a proper impression of the operation that has to be planned, for housing is but one element in the composition of a residential community. Simply to scatter 52,000 houses around the circumference of Toronto would not by any means solve the housing problem. For, in order that these households may operate it will be necessary to supply them with streets, sewers, water and power services, schools, shops, recreation areas and all the other amenities of modern living.

In order that the housing programme may be carried out with the utmost economy it is obviously necessary that houses should be placed on sites that can be provided with the essential services at the least cost both to the occupants of the houses and to the public in general. Houses placed on outlying or scattered sites that cannot be integrated with the network of urban services represent a wasteful form of development. Unfortunately there is a centrifugal force that continually urges home-builders to build outside the serviced areas of the metropolis; under the pressure of high costs families of modest income are tempted to seek refuge in undeveloped areas where taxes are lower and building regulations are less

strict. Both to these families and to the taxpaying public this scattering of sub-standard housing is dangerous. Sooner or later there is bound to come a demand for services to be extended to such scattered sites, and these will have to be provided in a manner that will not follow the most logical and economical plan. Meanwhile the very fact that the area is inadequately serviced and protected means that the owners of such houses possess insecure assets; in times of economic distress they find themselves in a vulnerable position and become the more easily a charge upon the municipality.

In Ontario some provision has been made for combating this threat of scattered and premature suburban development through the passage of the Planning Act 1946.* By the terms of this Statute each subdivision of land for sale as building lots has to receive the approval of the Minister of Planning and Development; a proposed subdivision may be rejected if it is regarded as premature or if the available utilities and municipal services are not adequate or if the subdivision does not conform with the official plan for the area prepared by the local Planning Board. In this way a restraint may be placed upon the most wasteful process of urban development.

It is clear that the "end-product" of a housing programme is not the construction of a specified number of housing units but is the creation of a series of fully functioning communities complete with all their operating services. The task of completing the housing programme is in fact inseparable from the process of Community Planning.

The Planning Boards established by municipalities, under the authority of the Planning Act 1946, thus will have an essential part to play in the development of Greater Toronto's housing programme for it will be

* Statutes of Ontario, 1946, Chapter 71, Section 25.

their responsibility to designate the areas for development and to determine the designs of the new communities that are to be created. In order to complete the housing programme both as economically as possible and as rapidly as possible the process of production must be planned so that each new residential area may successively come to completion before the next area is opened up and serviced. This "timing" of successive developments is, perhaps, an aspect of community planning to which too little attention has been given. In planning the construction of new communities it is necessary not only to lay out the sites but also to determine the sequence of operations. In this sense community planning is similar to the planning of any other kind of industrial process; it may be compared with the designing of the process by which the component parts of automobiles are delivered to the assembly line in a rational sequence so that the finished products can be brought to completion as economically and rapidly as possible. It has been pointed out above that the "finished product" of housing production is not the individual house but the operating community.

What is a community?

In the contemporary conception of town-planning a great city such as Toronto consists of a number of neighbourhood communities each of which may be regarded as a distinct social organism. In its 1944 Report the Toronto City Planning Board described a neighbourhood as "a more or less homogeneous area large enough to function as a social unit and not too small to stand on its own feet, with well-defined boundaries such as main roads, railways, ravines etc." It is true that in the existing built-up city these neighbourhoods are not always very clearly defined; they overlap and merge into one another. But the Planning Board was able to identify 78

neighbourhoods within the city boundaries, varying in size from 150 to 330 acres with an average of about 250 acres. In the older parts of the city there were found to be from 60 to 100 persons per acre - or a population of about 20,000 in a 250 acre neighbourhood. In that more modern part of the city which lies north of the C.P.R. North Toronto line there were found to be from 30 to 60 persons per acre - or a population of 7,500 to 15,000 in a 250 acre neighbourhood.

If the density of development in North Toronto, the most modern section of the city, may be regarded as a reasonable standard, then we may aim to achieve a similar standard in the development of the present housing programme. To produce 50,000 houses may therefore be regarded as a community planning programme for the creation of about 25 neighbourhood communities, each containing a population of about 7,500 people living in about 2,000 housing units (3.75 persons per household). Since, however, a considerable proportion of the programme will be absorbed by the filling out of existing incomplete neighbourhood areas it would perhaps be safer to state that 20 (and not 25) new neighbourhood units are required.

A good deal of study of community organization has in recent years been directed towards determining the most desirable size of an operating residential unit or neighbourhood. About 2,000 households appear to provide a well-balanced community. This number of households normally contains about the number of children required to support a school of manageable proportions and buys enough to keep a diversified group of retail stores in business. It is big enough to require its own recreation area and not so big as to make its own shops, schools and other community services too distant from any house in the neighbourhood.

With its population of 660,000 the City of Toronto has 85 Public Schools (one per 7,764 population) and 16 Secondary Schools (one per 41,250 population). On this basis the school district conforms very conveniently with the suggested size of a neighbourhood. Each new community with a population of about 7,500 will require one Public School and a Secondary will have to be provided for each group of five neighbourhoods. In all, therefore, the 50,000 unit post-war housing programme implies the need for 25 Public Schools and 5 Secondary Schools.

While it is generally agreed that the provision of open spaces has been inadequate in the built up area of the city there is no absolute standard to determine the proportion of residential land which should be dedicated as permanent open space. In its 1943 Report the Toronto City Planning Board presented some proposals for acceptable standards on the basis of which it may be calculated that residential areas containing 50,000 houses should be provided with about 320 acres of open space. Each neighbourhood should have at least 3 acres developed as playgrounds for children of pre-school and school age. Five open spaces each of about 30 acres should be developed as playfields to serve the young people in a group of neighbourhoods. And in addition to these spaces planned for active recreation there should be a reasonable contribution, perhaps 100 acres, towards the general park system of the metropolitan area, preferably as an integral part of a continuous inner green belt connected with the ravines and natural landscape areas of the Don and Humber river systems.

Each neighbourhood requires the service of a number of retail stores. It has been the practice in the Toronto area to devote the frontage of main traffic arteries to commercial use though this may have little relation

either to the convenient accessibility of these areas or to the amount of retail business that can be supported by a neighbourhood or group of neighbourhoods. In the zoning of land use within the new residential areas the local Planning Boards will need to make a more precise study of these retail requirements. It seems probable that a community of 2,000 households can be quite adequately served by about 40 stores which would require about 5 acres of land or frontage of about 1400 feet. Considerations of traffic movement and convenient distribution of these little shopping centres will recommend that they should not be strung along traffic arteries but should be located in compact groups at strategic points. In all, not more than 125 acres of land should be required for this purpose.

In addition to these specific requirements other features of residential communities will suggest themselves. Neighbourhood theatres and churches must be located and there will be a need for sites for a few light industries to provide local employment apart from the areas specifically zoned for industrial use.

The disposition of the new housing to be built in the Toronto metropolitan area rests with the local Planning Boards under the general co-ordination of the Metropolitan Planning Board. It is only necessary here to point out that the effective assembly of 50,000 housing units so that they form a series of distinct operating communities each complete with its local services and amenities, is an essential part of the planning of the housing programme. The public should be able to see these new neighbourhood communities clearly defined on the plans published and exhibited by the Metropolitan Planning Board and should be able to see each designed community in turn progressing towards completion. So far the only suburban municipality

which has attempted to formulate such plans is the Township of Etobicoke; it is greatly to be hoped that this process will be extended and supported by strong zoning controls before post-war building has got any further out of hand.

4.

The Progress of the Housing Programme

In TABLE 6 is shown the quantity of housing built in the Toronto metropolitan area over a period of sixteen years. This shows the gradual emergence from the depression years with a continuous increase of production from 1932 until 1941, followed by a withdrawal during 1942, 1943 and 1944. In 1945 residential construction returned to its 1941 scale with the completion of 3,533 units followed by the production of 4,447 in 1946; it had been hoped that there will be a steady increase through 1947 and 1948. This expectation had been supported by the Federal Government's assurance that the national programme would produce 60,000 units in 1946, 80,000 in 1947 and 100,000 units in each of the subsequent years. In proportion with this national programme it might be expected that the 1946 production of 4,447 units in the Toronto area would be raised to 6,000 in 1947 and perhaps 7,000 in 1948. Such an acceleration of production would, in fact, be required to fulfil the needs of the community as they have been calculated above.

In the face of this need for an increasing rate of production it is alarming to find that the rate is now likely to fall off rather sharply after 1947, rather than increase. This situation may be foreseen as the

result of a decline in the amount of residential construction initiated during the first half of 1947, as shown below.

TABLE A

VALUE OF RESIDENTIAL CONSTRUCTION CONTRACTS AWARDED JANUARY TO MAY (inclusive)

	Toronto Metropolitan Area	Montreal Metropolitan Area	All Canada
1945	\$ 7,904,300	\$ 6,862,900	\$60,884,700
1946	\$12,167,300	\$15,803,800	\$88,925,800
1947	\$ 8,046,200	\$12,402,900	\$56,695,200

(Source: MacLean Building Reports Ltd.)

It is anticipated that on account of the substantial carry-over of unfinished work from 1946 (an estimated ^{*} 40,000 units in all Canada) the total amount of housing that will be completed in 1947 may not actually prove to be less than that completed in 1946. It may even fulfil the promise of 80,000 units for the national programme and 6,000 for the Toronto area. But a carry-over of the same proportions is not likely to be repeated on account of the decline in new construction initiated this year. It appears therefore that the peak of production under present conditions of costs and incomes has now been reached; unless some new element is introduced into the housing programme, production is likely to decline to a volume considerably lower than is required to fill the continuing needs of the community. This might mean that production would stabilize itself at a volume sufficient to accommodate the annual increase of population but would not succeed in making

* Housing in Canada Quarterly Publication of the Central Mortgage and Housing Corporation, Vol. 2, No. 1, January 1947.

good the remaining shortage or in taking obsolete housing out of circulation.

The indications of a future decline in residential construction have been attributed to various causes. The most evident cause is the buyer's resistance to the continued increase of building costs coupled with the dissipation of wartime savings on the increasing cost of living. These costs are compared on TABLE 7. Since the end of the war the costs of basic building materials have risen from an index of 144.4 to 173.4 while the Cost of Living index has risen from 120.3 to 132.

The decline in new residential construction contracts is also attributed in part to the large carry-over itself. These unfinished housing units have certainly absorbed a considerable amount of the available labour and materials and until this business has been brought to completion it would be reasonable to expect a postponement of further new business initiated.

Another contributing factor is the demand for labour and materials for the construction of business, industrial and engineering projects. (See TABLE 8.) While the value of residential contracts awarded in the Toronto metropolitan area in 1946 was about the same as that for 1945 (\$26,000,000) the value of all other kinds of construction contracts was doubled (rising from \$26,000,000 in 1945 to \$50,000,000 in 1946). The more attractive and secure type of employment offered in the construction of large buildings has removed from the residential field a very large labour force which could otherwise have been engaged in the construction of housing. Much controversy has arisen over the legitimacy of attempting to restrain business and industrial building during a period of acute housing shortage. The Federal Government has disclaimed any responsibility for such regulatory action and has declared that the municipalities must exercise any controls

that could be devised. But in a complex municipal structure such as that of metropolitan Toronto, containing thirteen individual municipal governments, the difficulties of determining a common course of action are obviously insuperable, particularly in view of the fact that all municipalities welcome industrial and commercial buildings as revenue-producing assets whereas housing for the middle and low income families represents expenses for the provision of schools and other municipal services. With their anxiety to look after the welfare of the un-housed families in their communities and at the same time benefit the existing taxpayers this dilemma of the municipalities may be described as pitiful. For the City of Toronto itself the situation is particularly poignant; the city has to hold within its boundaries the great mass of un-housed families and yet it has no vacant land on which permanent housing could be built for them. If the City of Toronto itself were to prohibit certain classes of non-residential building there would be no assurance that the labour and materials so released would in fact be used for the construction of housing in the suburban municipalities who might simply benefit themselves by continuing their programmes of industrial and commercial building. As a practical operation, the deliberate diversion of labour and materials from non-residential construction into housing construction obviously could only be effected by a senior government and, specifically, by a governmental body which was already committed to responsibility for the total housing programme and had the facilities for directing its development through financial and legislative provisions.

As the post-war housing programme got under way one outstanding characteristic rapidly emerged. That was the lack of new housing built for rent. When the 1946 building season opened, 57 per cent. of the houses under

construction were being built for sale by speculative builders, 25 per cent. were being built for owners and only 18 per cent. were being built for rent. (Virtually the only new rental housing being provided in the area were the three projects, each containing 200 dwellings, built by Wartime Housing Limited for the families of veterans.) This immediately represented a serious gap in the programme since at the end of the war there were in the city about ten thousand fewer rental housing units than there had been when the war started.

In 1930 about half of all the dwellings within the City of Toronto were houses occupied by their owners, the other half being rented houses and various forms of multiple housing such as duplexes, apartments etc. From 1930 till 1940 there was a continuous decline in home ownership till in 1941 owner-occupied houses represented only 41.3 per cent. of all the dwellings in the city. Since then, under the pressure of the housing shortage there has been a marked increase in home-ownership, the proportion having risen to 47.1 per cent. by the Fall of 1944. The competitive bidding of those looking for a home in the congested city caused prices of houses to advance sharply. Rent control prevented landlords from getting what they regarded as the full earnings from their properties and they took the opportunity offered by the unrestricted sales market. Consequently many long-time tenants faced the prospect of either moving or buying. Between 1941 and 1945 more than 8,000 houses, previously rented, came into owner-occupation. Consequently at the end of the war there were about ten thousand fewer rental housing units than there had been when the war started. This significant change of tenure took place in spite of the wartime orders which restricted evictions of tenants.

The post-war concentration upon the production of houses for sale rather than for rent is to be seen in the type of accommodation that has been built. In the Toronto metropolitan area during 1945 and 1946, 89.7 per cent. of all units completed were single family houses (a few of them semi-detached), only 3.4 per cent. were in the form of duplexes or apartments and 6.9 per cent. were conversions. The types of accommodation provided are shown in detail on TABLE 9.

The efforts to produce rental housing through the agency of Housing Enterprises Limited (a limited dividend housing corporation created by the Federal Government and the Insurance Companies) and the subsequent withdrawal of this agency in the Spring of 1947 on account of high costs and rents, dramatized the fact that the production of new rental housing is not under existing circumstances a profitable undertaking. Although there are immediate prospects of full occupancy and adequate returns, particularly since the removal of rent control from new accommodation in July 1947, yet any cautious investor has to reckon with the possibility that immediate profits might be more than wiped out by the future competition of housing built during a later period of lower construction costs.

CHAPTER III

HOUSING COSTS

1.

The Cost of a 5,000 Unit Annual Programme

During 1946 the value of residential construction in the Toronto metropolitan area was somewhat more than \$26,000,000 for a production of about 4,500 housing units. If the programme were maintained at an annual volume of 5,000 units the expenditures on construction would be about \$30,000,000 a year. From one point of view this may be regarded as an alarming cost to be met out of the income of the community. From another point of view it may be regarded as a great source of employment and business for the community. * To begin with the construction of 5,000 housing units represents jobs for one year for about 14,000 men of whom about 6,800 would be employed on the actual building sites, while about 8,000 would be employed in the industries supplying building materials and in the transportation services. The annual pay-roll of construction workers would be more than

* Figures in this paragraph are derived from material presented in Manpower and Material Requirements for a Housing Progress in Canada, a report prepared by the Department of Reconstruction and Supply, (the King's Printer, Ottawa, 1946).

\$11,000,000. Orders for building materials to manufacturers and distributors, including transportation costs to the site, would vary between \$14,400,000 and \$17,500,000 with nine major supply industries participating as follows:

(a) Cement, gravel and sand	\$1,220,000
(b) Brick, tile and stone	795,000
(c) Lumber and its products	6,810,000
(d) Lath, plaster, stucco, insulation materials	1,805,000
(e) Roofing materials	465,000
(f) Paint and glass	510,000
(g) Plumbing and heating equipment	2,970,000
(h) Electrical equipment and fixtures	620,000
(i) Other building materials, mainly steel and other metals	790,000

In addition to these expenditures on labour and materials, contractors and builders would earn in overhead and profit about \$3,000,000 and real estate transactions would amount also to about \$3,000,000. At the same time professional people, especially architects, lawyers, engineers and surveyors, would be busily occupied and there would be an expanded volume of business for the lending institutions responsible for financing the major part of the housing programme.

In order to place in its proper perspective the proposal for a \$30,000,000 (annual) housing construction industry it should perhaps be recalled that during the five pre-war years 1935-1939 inclusive, the housing industry in the Toronto area was operating at an annual average of only \$13,500,000 and the construction industry as a whole (residential, business, industrial and engineering projects combined) averaged only \$23,178,000 a year. This comparison may cause some doubt to be placed upon the ability of metropolitan Toronto's economy to carry such a large residential construction programme.

The Components of Housing Costs

* To the owner of Housing the costs are made up of five components: the costs of Building, Land, Money, Maintenance and Taxes. Although the owner or purchaser of a house may meet these costs in various ways and at various intervals yet they must ultimately be paid out of the current income of the occupant. It is therefore convenient to think of these costs as being paid in regular monthly instalments as rent. The cost of carrying a \$7,000 housing unit over a 20 year period can be broken down into the following components:

TABLE B

GROSS MONTHLY COST OF A \$7,000 HOUSING UNIT		
	Monthly Payment	Per Cent.
(a) Building		
Cost of Construction \$6,225	\$22.94	39
(b) Land		
Cost of Improved Lot \$775	3.23	6
(c) Money		
\$2,000 cash at 3%	15.68	27
\$5,000 NHA Loan at $4\frac{1}{2}\%$		
(d) Maintenance	6.66	11
At \$80 per annum		
(e) Taxes		
At 2% of \$7,000	<u>11.66</u>	<u>17</u>
	\$60.17	100 per cent.

* (for footnote to page 45 see page 47)

It should be noted that in practice the private owner-occupant of a new house does not have to meet these full costs out of income. On a \$7,000 house a purchaser is normally required to make an initial cash payment of about \$2,000. This is drawn from his savings and it is not to be presumed that an owner-occupant would return this sum to savings or pay interest on it. It is, however, one of the component costs and the purchaser has in effect forfeited the interest which such savings would have yielded. In rental housing, therefore, this item must appear within the gross monthly cost to be covered by rent payments. But if, however, this cash payment is not included within the monthly payments that must be met by an owner-occupant the current costs would appear as follows: (here the \$2,000 has been deducted from the cost of construction in item (a) and the interest on the \$2,000 has been omitted from item (c)).

TABLE C

MONTHLY COST OF \$7,000 HOUSING UNIT TO OWNER-OCCUPANT		
	Monthly Payment	Per Cent.
(a) Building		
Cost of Construction \$6,225	\$17.60	35
less \$2,000 cash payment		
(b) Land		
Cost of Improved Lot \$775	3.23	7
(c) Money		
\$5,000 NHA Loan at $4\frac{1}{2}\%$	10.68	22
(d) Maintenance		
At \$80 per annum	6.66	13
(e) Taxes		
At 2% of \$7,000	<u>11.66</u>	<u>23</u>
	\$49.83	100 per cent.

From the above break-down it is evident that reductions in construction costs offer the best prospects of reducing housing expenses since the building itself is the largest single item and the cost of the loan required to pay for building is the next most substantial element. And since the cost of borrowing money is such a prominent feature it is also evident that successful efforts to fortify the security of loans and so reduce interest rates may bring substantial savings to the householder. Ultimately, of course, the security of loans must depend upon the employment and solvency of the occupants of housing and so is deeply involved in the whole national programme for full employment and social security. But through the operation of the housing programme itself it may be possible to provide for greater financial security and a consequent reduction in the current expenses of housing; this may be achieved by improvements in the fabric of the house and in its setting within the community. The quality of housing may, in fact, come to be an essential factor in reducing its current expenses to occupants. This theme runs through the following discussion of the five component items in housing costs.

(a) Building. The cost of constructing a house depends upon its size and upon the price of the materials and workmanship employed. In general principle it must be remarked that a cheaper house does not

* (footnote to page 45) The figures used in this section are based upon data specially provided by the Central Mortgage and Housing Corporation. This data covered all houses for the construction of which loans had been made under the National Housing Act 1944 in the Greater Toronto area during 1946. The interpretation placed upon this data is that of the author and no responsibility is attached to the Central Mortgage and Housing Corporation.

necessarily reduce the cost to the consumer in view of the fact that housing expenses are items on a monthly budget and therefore depend not so much upon the initial capital sum as upon the length of time over which the amortisation payments can be spread. The better the design, the substance and the environment of a house the longer will it remain useful and attractive and therefore the less should each successive occupant have to pay towards its initial capital cost. A \$5,000 loan available under the terms of the National Housing Act 1944 costs \$31.52 a month (Interest and Principal) if spread over 20 years but would cost only \$25.21 a month if spread over 30 years.

It is clear that houses of poor quality and temporary character, the costs of which must be paid off quickly while they retain some desirable characteristics, may ultimately prove to be the most expensive to the community. The ability of architects, manufacturers and community-planners to design housing which in 20 and 30 years' time will be almost as desirable as it is to-day, may prove to be the most effective step towards reducing the current expenses of housing.

When it is realized that the cost of building represents less than 40 per cent. of total housing expenses it becomes evident that the individual items of materials and labour represent but minor factors in the monthly payments. Even a 20 per cent. reduction in the cost of labour (labour represents about 40 per cent. of the cost of construction) would only reduce the monthly price of a \$7,000 house by about \$2.00.

(b) Land. The cost of suburban building lots in the Toronto area range between \$200 and \$1,000. For all houses built in the area during 1946 under the terms of the National Housing Act 1944 the prices of land

fell into the following groups:

TABLE D

PRICES OF LOTS FOR HOUSES BUILT THROUGH N.H.A. LOANS TORONTO METROPOLITAN
AREA 1946

Price Range	Per Cent. of Lots in Each Price Range
\$ 200 - \$ 299	2.8 per cent.
300 - 399	5.1
400 - 499	10.0
500 - 599	10.0
600 - 699	21.8
700 - 799	11.0
800 - 899	26.3
900 - 999	10.2
1,000 - 1,099	2.8
	100.0 per cent.

Land costs may be reduced through the opportunity to use sites which have not acquired an inflated speculative or commercial value and which may be built upon without expensive preparations of grading and drainage. But if the attempt to find cheap land leads to placing houses at considerable distances from centres of employment the apparent saving to the consumer may prove to be offset by added costs of transportation. Furthermore, land which has not acquired considerable speculative value is only to be found in areas which do not possess urban services and amenities; the eventual need to supply these services and amenities may likewise impose unexpected costs upon the occupants of houses and taxpayers in general.

(c) Money. The cost of borrowing capital for the construction of a house and the acquisition of building land represents about one quarter

of all housing expenses. Through the procedure established in Canada by the three successive National Housing Acts and through the present administration of the Central Mortgage and Housing Corporation much has been done to stabilize this formidable component of housing costs. A crown corporation now shares with private financial institutions the risks of lending capital; the credit of the Dominion of Canada has been brought into play in order to make building money less expensive. C.M.H.C. has set up an elaborate nation-wide administrative organization to see that its loans are secure; by actual inspection of houses constructed there is an attempt to establish that the sound qualities of a dwelling will last throughout the period of the loan. By appraising the purchasers' incomes their probable ability to make periodic payments is judged and an attempt made to prevent borrowers from assuming obligations beyond their capacities.

The rate of interest required must be sufficient to meet three charges:

- (1) The normal rate of interest on investment capital
- (2) The security against the failure of the borrower
- (3) The administrative charges.

It is clear that private financial institutions could not stay in the housing mortgage business at a rate of interest lower than that which obtains to-day. Any prospect that interest rates could be reduced to $3\frac{1}{2}$ per cent., as has sometimes been suggested, must be based on the willingness of the public to use public revenue for supplementing the cost of operating housing loans. The entry of the Central Mortgage and Housing Corporation into the field, with the aid of public capital, already makes it essential that the loans so

placed should be protected against the risks of unemployment and neighbourhood deterioration. It should certainly be realized that at a time when the shortage of housing coupled with high building costs is forcing many householders to assume loan obligations which are dangerously near the limit of their financial capacity, the risks involved in lending building money are very great. Only history will be able to prove whether the present $4\frac{1}{2}$ per cent. interest rate is sufficient to cover these risks and the costs of administration.

In addition to the interest that must be paid on money loaned, the purchaser of a house is to-day required to make a substantial cash payment. For houses built in the Toronto area during 1946 under the terms of the National Housing Act 1944 this payment has represented from one fifth to one third of the capital cost of the house and lot.

TABLE E

CASH CONTRIBUTIONS OF BORROWERS. LOANS MADE UNDER NATIONAL HOUSING ACT 1944
TORONTO METROPOLITAN AREA 1946

Price Range, House and Lot	Average Cash Payment	Per Cent. of Total Cost
\$5,500 - 6,500	\$1,587	25 per cent.
\$6,500 - 7,500	\$1,995	29
more than \$7,500	\$2,731	33

In other words the loan on a \$6,000 housing unit has not usually exceeded \$4,500, the loan on a \$7,000 unit has not exceeded \$5,000 and the loan on a \$8,000 unit has not exceeded \$5,300. These substantial cash payments which borrowers have had to make have arisen largely of course because of the

distinction that has been made between the actual cost of a house and lot and the "lending value", which is a smaller sum regarded by the loan appraiser as the true value of the house. During 1946 "lending values" in the Toronto area ranged between 80 and 90 per cent. of the estimated actual cost of the house and lot. For instance a house and lot actually costing \$8,300 would be assigned a "lending value" of \$7,000 on which a loan of \$5,700 would be made (that being the legal maximum loan for a property valued at \$7,000); the purchaser would consequently be required to make a cash contribution of \$2,600.

The element of the cash contribution in housing loans has created a somewhat misleading comparison between the costs of home-ownership and rental housing. To obtain a strictly comparable analysis of the component costs the house-purchaser should include the interest and the retirement of the capital sum made as a cash payment. (The implications of this point are brought out in TABLE B and C.) For if this cash payment were not made, the interest thereon would enable the householder to occupy rental housing at a proportionately higher monthly rate.

(d) Maintenance. The expenses of keeping a house in good order and repair usually occur at such irregular intervals that few homeowners regard them as part of the monthly and annual cost of housing. They are none the less very real costs the proportions of which are inversely related with the durability and cost of the original structure of a dwelling. It costs less to build with perishable materials but costs more to defend them against deterioration. For the security of the lending institutions and the welfare of future generations of occupants it is essential that physical deterioration

should be held in check; the process of obsolescence is the most serious drain on housing supply and leads to costs of replacement which will ultimately fall upon the community at large.

In large-scale rental housing the costs of maintenance are often taken to be \$100 annually per housing unit. A figure of \$80 annually has been taken here to provide adequately for repairs, replacements, decoration and other normal items of upkeep required by the small home owner.

(e) Taxes. The streets, utilities, schools, parks and other services that are required by householders are paid for through property taxes. Without these services a household could not function; the amenities of the neighbourhood that are largely created by these municipal services form part of the value of a house that must be paid for. It is widely believed that since a large proportion of the municipal tax revenue is spent by the local government on services not directly associated with real property, that these taxes should not be based on property values and become an element in housing costs. But it may equally well be argued that all community services which make a city more desirable to live in and work in must, however indirectly, influence the value of every house within its area.

It is difficult to make generalizations about the cost of local taxes because these vary so much between one municipality and another and between different districts in the same municipality and they also vary over the time during which mortgage payments are being made. The principal cause of variation is the method of paying for local improvements in newly developed areas; these are commonly assessed against properties in a new residential area over a period of about five years after which the rate of

taxation reverts to a normal mill-rate on the assessed value. In the absence of any better uniform figure which can be used, it has here been assumed that the taxes on new houses represent annual payments of about 2 per cent. of the total value of a property. In other words the taxes on a \$6,000 house are about \$120 a year and the taxes on a \$7,000 house are about \$140 a year.

It should be observed that it is now common practice for local taxes to be paid by the lending institution which has placed a mortgage on a new house. The purchaser's monthly payments include payments for taxes. This procedure protects the mortgage holder from finding that a debt has accumulated against a property on account of unpaid taxes.

3.

The Components of Construction Costs

In 1943 a * survey was undertaken by the Dominion Government's housing agency to determine the relative proportions of the costs of materials, on-site labour, overhead and profits in the building of houses. The analysis, based on the experience of a large number of contractors throughout Canada who had been lately engaged in residential building, yielded the following ratios:

Cost of materials	50 - 55 per cent.
Cost of on-site labour	35 - 40 per cent.
Overhead and profits	10 per cent.

The experience of post-war building seems to indicate that a higher proportion

* Dr. O. J. Firestone: The Labour Value of the Building Dollar
A report made for the Housing Administration, Department of Finance,
Ottawa, (King's Printer, 1943.)

of costs should be attributed to overhead and profits, particularly during a period of reorganization when builders are faced with the hazards arising out of uncertainties in the supply of both materials and skilled labour. On the whole it appears reasonable now to attribute costs of construction to materials, on-site labour and overhead in the proportions of 50, 35 and 15. On this basis a house which contains materials costing \$4,000 would consume \$2,800 in labour costs on the site and would carry \$1,200 in overhead and profits representing a total cost to the purchaser of \$7,000.

The costs of house-building vary in relation with the size and plan of the house and also in relation with the materials of which it is built. Since there is an infinite number of possible variations in the form and substance of a house it is extremely difficult to present simple comparable generalizations about the cost of building. In order to make valid comparisons between the costs of building in solid brick and the costs of building a wood-frame dwelling it would be necessary to compare two houses of similar size and plan constructed under identical circumstances. Actual building experience does not offer the opportunity to make such scientific comparisons.

The housing units created in the Toronto metropolitan area during 1945 and 1946 may be conveniently classified under five different types of construction -

- Wood frame with wood siding or shingles
- Wood frame and brick veneer
- Cinder or cement blocks and stucco
- Brick facing and masonry blocks
- Solid brick.

About one third of all the houses built in the area have been constructed of solid brick, about one quarter have been of wood frame construction and another

quarter have been built of masonry blocks with a brick facing. (See TABLE 10.)

Although it is not possible to determine the costs of all these houses which were built by many contractors under many different circumstances, yet it is possible to formulate some general comparative figures through the use of representative figures through the use of representative examples. This method was used in a recent study published by the Department of Reconstruction and Supply entitled "Manpower and Material Requirements for a Housing Programme in Canada". Here the "representative" examples were taken to be housing units of a desirable character constructed in accordance with the standards required for obtaining loans under the National Housing Act 1944. For such "representative" housing units specifications of materials were prepared so that comparisons could be made between houses constructed of different materials but all of the same size and accommodation. For this purpose the sizes of the representative examples have been taken as follows:

	Cubic Feet	Number of Rooms
Single Family House	16,000	6
Multiple Unit Dwelling	15,000	5 1/3

(The representative "multiple unit dwelling" is assumed to be one living unit within a building containing three dwellings; its cost therefore represents one third of the total costs of such a building.)

The material specifications of each representative house have been classified into 63 items under 10 headings:

1. Cement, Gravel and Sand
2. Brick, Tile and Stone
3. Lumber and its products
4. Lath, Plaster and Insulation Materials
5. Roofing Materials
6. Paint and Glass
7. Plumbing Equipment and Fixtures
8. Heating Equipment and Fixtures

9. Electrical Equipment and Fixtures
10. Other Materials.

Current prices in the Toronto area (December 1946 - February 1947) have been obtained for all of the items specified and these have been assembled to give the total costs of materials required for the construction of eight different types of dwelling unit, five types of single family house and three types of multiple unit. Two examples of these detailed schedules are shown on TABLES 11 and 12. These schedules are identical with those used in the study entitled "Manpower and Material Requirements for a Housing Programme in Canada" but it was found that costs in Toronto at the turn of the year (1946 - 1947) were in all cases higher than those which had been assembled for the Canadian study published in September 1946. These total costs will, of course, require further modification as the prices of building materials change during subsequent months.

To the costs of materials for each type of house have finally been added the proportionate costs of labour and of contractor's overhead, thus obtaining a figure for the total cost of each representative type of dwelling. These compilations are shown on TABLES 13A and 13B; in the former TABLE the proportionate percentages of Materials, Labour and Overhead have been taken as 50, 35 and 15 respectively while in the latter table they have been taken as 52.5, 37.5 and 10 per cent. respectively. The total costs have been summarised on TABLE F, following, based on the proportions used in TABLE 13B. Here also are shown the costs per cubic foot.

TABLE F

COSTS OF CONSTRUCTING REPRESENTATIVE TYPES OF DWELLING IN THE TORONTO AREA
JANUARY 1947

Type of Dwelling	Total Cost of Unit	Cost per Cubic Foot
Single Family Houses		
of 16,200 cubic feet		
(a) Wood frame with siding	\$7,344	45.4 cents
(b) Wood frame with brick veneer	7,712	47.6
(c) Masonry blocks and stucco	7,278	44.9
(d) Masonry blocks, brick facing	7,952	49.0
(e) Solid brick	8,028	49.5
Multiple Unit Dwellings		
of 15,000 cubic feet		
(f) Wood frame with siding	\$5,405	36.5 cents
(g) Masonry blocks, brick facing	5,472	36.4
(h) Solid brick	5,529	36.8

The costs of construction given above have been derived from:

- (a) Schedules of costs of materials of which two examples are given on TABLES 11 and 12
- (b) Compilations of Materials, Labour and Overhead costs in the proportions of 52.5, 37.5 and 10 per cent, respectively as shown on TABLE 13B.

The schedules of materials given on TABLES 11 and 12 give some suggestion of the great diversity of operations that are set in motion by the decision to build a house. There must be gathered together on the building site a great variety of materials brought from many different parts of the country and transported by many different agencies. Some of these materials are already manufactured, some of them are roughly finished and some of them reach the site in their raw state. A great variety of skills and tools are then required for fashioning these materials and assembling them into the form of a house. The very diversity of these operations - the number of primary producers, manufacturers, tradesmen and transporting

agencies which are involved - all contributes to the ultimate complex of costs which is widely spread and deeply rooted in the economy and wage structure of the nation. It is this very complex nature of the building process that makes it so difficult to identify where economies could most profitably be sought. Critical observers of the building industry have only been able to agree that, within the traditional processes of house building, there is no one simple approach to reducing costs. "Any considerable cost reduction," declares an eminent American^{*} authority on the subject, "must come from an accumulation of many relatively minor items, no one of which, taken by itself, is of outstanding importance." The truth of this statement may be illustrated by the following examples showing the approximate percentages by which the total construction cost of a dwelling unit would be reduced as the result of a 20 per cent. reduction in the cost of various component items. For instance a 20 per cent. reduction in plumbing materials would reduce the total cost of constructing a dwelling by only 1.2 per cent. and a 20 per cent. reduction in the price of lumber, by far the largest single item in house construction costs, would reduce the total cost by no more than 4.6 per cent.

20 per cent. reductions in the cost of each of those items would reduce the total cost of constructing a dwelling unit by the stated percentages**

Lumber, at the site	4.6 per cent.
Plumbing materials, at the site	1.2
Heating materials, at the site	.9
Cement, Gravel and Sand, at the site	.8
Carpenters' wages	2.8
Plumbers' wages	1.0
Wages of skilled workers in general	5.8
Wages of unskilled and semi-skilled workers	1.7
General Construction overhead and profit	2.0

* (for footnotes to page 59 see page 60)

**

From time to time it is claimed that high costs of construction can be attributed to this or that element in the building process. It is at the present time a commonplace to say that the productivity of labour is to be blamed; it is said that construction workers are not performing a day's useful labour for a day's wage. Though there may be some truth in this, the significance of any such individual item of costs is diminished in importance when it is considered in relation with all other elements in the cost of construction. The few examples quoted above simply serve to illustrate this all too obvious fact that lower costs of construction cannot be achieved by any one facile policy; they must await the concurrence of many independent events which may influence prices and efficiency in those many economic activities directly or indirectly associated with the building process.

4.

The Nature of The Building Industry

Any serious consideration of the costs of building houses seems to lead to the conclusion that no really significant changes in the levels of costs are likely to be achieved without some revolutionary changes in the building process itself. In the simplest terms, that process consists of the movement of materials from their primary source into the finished building with labour being applied to the fabrication of these materials

(Footnotes to page 59)

* Miles E. Colean: American Housing (The Twentieth Century Fund, 1944) page 52

** Figures based on component costs developed in The Labour Value of the Building Dollar quoted above.

at various stages along the line. The ultimate cost of a building is in fact made up of the accumulated costs of moving the materials plus the accumulated costs of the labour that has been applied to those materials plus the accumulated overhead and profit of all those who have handled the materials en route. It is clear therefore that the efficiency and economy of the building process is most likely to be improved by efforts to smooth the flow of materials and to concentrate the work of fabrication at the fewest possible points along the line.

A study recently made by the U.S. National Housing Agency* revealed the fact that some 40 per cent. of the costs of materials at the site is attributable to charges for distribution and transportation while the remaining 60 per cent. is accountable to the costs that accumulate up to and including the process of manufacture. After leaving the manufacturer's warehouse it is common procedure for building materials to be shipped again to a retailer and stored again before being finally delivered to the site for assembly into a building. This does not apply of course, to all kinds of building materials, some of which are delivered directly to the site by the manufacturers and so save the intermediary costs of transportation, storage and handling. But the need for an elaborate system of distribution has been made necessary by the characteristically small scale of the firms undertaking the actual construction of houses. House-building has not attracted large-scale construction firms and the field has been left almost entirely to the small home-builder whose organization can quickly adapt itself to the fluctuating demand for housing. The small speculative builder

* National Housing Agency: Housing Costs (Washington, D.C., December 1944).

undertakes the erection of only a few houses at a time, saving the cost of managerial overhead and office space and protecting himself from market uncertainties by keeping his output in line with the immediate demand of prospective purchasers. Under such circumstances it has been impossible to smooth out the flow of building materials and simplify the process of production. Fundamental changes in the process can only be brought about through the entry of large-scale producers into the housing industry and they could only enter upon such a business if they could anticipate a continuing market which would justify the necessary capitalization. Since the expectation of such market conditions has never yet seemed justified the organization of the residential building industry has stagnated. This experience seems to indicate that no great revolutionary changes and economies can take place unless governmental authority can either guarantee the housing market or be prepared to capitalize the housing industry itself. The difficulty of bringing large-scale fabricating industries into operation has now been demonstrated in the United States where even during the housing shortage of 1946 pre-fabricators were unable to raise capital privately and had to obtain funds from the government's Reconstruction Finance Corporation in order to establish and equip their production plant. It may be said, however, that if there were an assured demand for its products a large-scale housing industry could be organized with private capital. Is it possible that this might be brought about by the introduction of a public housing programme which would supplement and reinforce the private market for housing?

The hope that substantial economies could be achieved by a more industrialized process of house-building is suggested by a comparison

of the labour content in the cost of making a house and in the costs of various manufactured products. TABLE G shows that the percentage labour content in the value of manufactured goods in general averages 18 per cent. Compared with the labour costs of house-building, 35 per cent. for on-site labour alone, this points to the conclusion that residential building has not yet acquired the characteristic economies of industrial technology. The principal reason for this contrast lies, of course, in the fact that a house is immobile and its final assembly has at present to be done piece by piece out on the site under all the hazards of weather and without permanent equipment. It has not been possible to apply to residential construction the assembly line system with tasks broken down into simple and comparatively unskilled operations; in residential building the assembly line is fixed and the workers move.

TABLE G

LABOUR COST AS A PERCENTAGE OF THE TOTAL VALUE OF
VARIOUS CLASSES OF FINISHED MANUFACTURED PRODUCTS

House (Labour on site only)	35-40 per cent.
Chemical products	15 per cent.
Non-metallic mineral products	11
Non-ferrous metal products	15
Iron products	28
Wood and paper products	20
Textiles and textile products	19
Animal products	9
Vegetable products	10
Miscellaneous products	19
Average	18 per cent.

Derived from Statistics in Canada Year Book 1946 pp.400-405

It is only when large-scale projects are planned that there are opportunities to introduce important features of industrial organization aimed to reduce the high labour costs in the building process. First of all, by standardizing dimensions and details it becomes possible to place a greater proportion of the finishing work under factory conditions where the work can proceed at a steady flow throughout the seasons, uninterrupted by weather conditions and the irregularities of the market. Ultimate economics are also to be sought by fabricating wall sections off the site and simplifying the elaborate form of structure which has been evolved under the conditions of hand assembly. At the present time the basic form of house building is a structural framework to which are applied layers of interior and exterior insulating "skins" each applied by different tradesmen - bricklayers, carpenters, plasterers and painters. In this conception of a structure there has been little advance during the age of industrialization. We now await the results of experiments being prepared at the National Research Council in Ottawa which may lead to a system of assembly lending itself to partial factory production and providing a kind of industrialised residential construction suitable to Canadian conditions.

Whatever economics may be achieved by applying more of the necessary labour to building materials before they reach the site, there will always remain a relatively high proportion of on-site labour costs for assembly. Here again there are economics that arise logically out of large-scale projects. Efficiency may be gained by the repetition of familiar tasks; by planning the production of a large group of houses it is possible to move working teams from one unit to another in sequence as each process

is completed. The building work can be carefully broken down into a number of operations for each of which the necessary personnel and equipment can be brought into action as each unit in turn passes through the successive phases in its assembly and completion. In Canada we have already made some attempt to gain efficiency through the building of groups of houses; the "integrated" housing scheme sponsored by the Central Mortgage and Housing Corporation was largely aimed to provide the conditions under which a builder could apply his labour most efficiently by building a group of houses in one planned operation. The guarantee of sale provided by the Corporation also removed the risks of marketing a group of houses all brought to completion at about the same time in the same locality. It is too early yet to appraise the economies which may be attributed to the "integrated" scheme.

In this approach to building economy there is a fundamental dilemma concerning the scale of building organization. It is a matter of general belief that the small-scale speculative builder, capable of producing from five to a dozen houses a year, can work more economically than a large organization which must support some high-salaried executives and maintain a downtown office with a staff of draftsmen and stenographers. This is the contention of the organized home-builders who have resisted the introduction of officially sponsored large-scale producers such as Wartime Housing Limited and Housing Enterprises Limited. Though there is no statistical evidence to support this claim of the small home-builders (the overhead costs of Wartime Housing Limited have never been published) yet it is probably true in so far as these two Canadian large-scale housing organizations are concerned. The fact is, however, that Wartime Housing Limited had to be organized for

administration on a national basis in order that an emergency demand for housing could be fulfilled regardless of cost. To some extent Housing Enterprises Limited must also be regarded as a public service organization which had to carry a large administrative overhead simply in order to operate on a national basis. It must be recognized that neither of these two organizations was set up on a large scale for the specific purpose of introducing new and more economical building procedures. Obviously the size of the operating organization does not in itself create economies and may well be the cause of administrative expenses. But this fact and the experience of Wartime Housing Limited should not be allowed to confuse the issue. It is beyond dispute that there are certain economies in the building process which could only be introduced by large-scale organizations working on large-scale projects; such producers should be established in the field in order that they may evolve new industrialized methods of housing construction. Large-scale housing organizations which fail to improve on the production methods of small-scale builders and simply add further administrative costs thereto, certainly have no justification for their existence.

The prefabrication of wall panels, floorsections, stairs, kitchen sets and mechanical units must be done in quantity in order that economies of factory production may become effective. But the cost of transporting bulky prefabricated sections confines the radius of distribution to a single metropolitan area. The market for prefabricated building sections is not a national one but is of only local proportions. It is therefore the more difficult to put such prefabrication processes into operation with any kind of economic security. In fact it is only when large-scale local projects

are planned that any significant degree of prefabrication can be obtained. A local project must itself be large enough to support a process of prefabrication. It is at this scale of operations that the large producer first begins to overtake the costs of the small home-builder; and this can only be achieved when shrewd engineering and architectural design are brought into play.

No mention of the word "prefabrication" would be complete without reference to the popular belief that any kind of standardization implies an objectionable uniformity in the design of houses. This is one of those engaging myths of housing that has its counterpart in the allegation that families moved out of slums into new housing habitually keep their coal in the bathtub. This kind of objection to prefabrication and the design of large-scale projects is certainly quite groundless. The Toronto urban area is characterized by the extreme monotony and dullness of the houses that have been built by the small-scale home-builder; there has been an endless repetition of the same types of house, their basic uniformity made all the more evident by the vain attempts to give each dwelling some individuality through the application of some trivial surface ornament. The planning of large-scale projects provides the opportunity to organize deliberately some variations of design arising logically out of the orientation, internal planning and materials of individual units; such variations may be introduced in such a way that the grouping and colour of contrasting elements may have some dramatic effect. It is certainly significant that in the Toronto area the only communities constructed since the war whose planning has departed from the monotonous orthodoxy of real estate subdivision have

been the three projects developed by Wartime Housing Limited and one or two other private projects under unified architectural control.*

* Heathbridge in East York and Thorncrest Village in Etobicoke Township are examples of planned communities in the Toronto area.

CHAPTER IV

THE COMMUNITY'S CAPACITY TO PAY FOR HOUSING

Any examination of the housing problem lends inevitably to the conclusion that the community's capacity to pay for housing is the limiting factor in the accomplishment of a programme. In order to fill the housing needs of metropolitan Toronto the building industry must not only be equipped to build the required number of units, but it must also be able to provide this quantity of housing at a price that can be reached by the families in the community - and this without departing from reasonable standards of quality. Unless the cost of owning or renting a new home can be brought within the financial capacity of the majority of the families in the area the entire programme may well collapse and bring down with it many of the hopes for security and full employment in the post-war years. The danger signals sounded by such a maladjustment of prices and incomes has already been heard early in 1947 as housing production has failed to fulfil its seasonal quota.

To the solution of this problem there are two approaches, each of which must be pursued simultaneously. By structural economies and by improved organization of the building industry the cost of housing itself

must be reduced while, at the same time, the purchasing capacity of families must be raised. Unfortunately these two developments are perversely inclined to conflict with one another. To increase family income by raising wages threatens also to raise the cost of building. Conversely the lowering of building costs, through reductions in wages and the introduction of labour-saving methods of construction, might also reduce the earnings of a large element of the population - unless the total volume of building was thereby proportionately raised. The dilemma is fundamental. The postulates are nicely contradictory.

The effective economic demand for new housing is created by those families who need housing and who have the money to pay for it. The community's capacity to obtain the necessary additions to its stock of housing is the sum of the capacities of individual families. As a first step towards measuring the effective demand it is therefore necessary to determine the numbers of families at various income levels and to estimate how much families of various sizes and incomes can afford to spend on housing. It must be confessed that neither of these two calculations can be made with any real accuracy. To begin with, the decennial census is the only occasion on which comprehensive records of family income are obtained and we are therefore compelled to base our calculations on figures derived from the 1941 census. Furthermore the proportions of their incomes which families spend on housing vary considerably under the pressure of circumstances and it is therefore difficult to anticipate to what lengths families may go in order to obtain accommodation which they urgently need. The analysis which we are able to present cannot therefore do more than depict in general terms the nature of the economic problem with which the community is faced.

1.

Distribution of Income

TABLE 14 shows the numbers and percentages of families at successive income levels, as they were measured by the 1941 Census in the Toronto metropolitan area. At that time there were about 204,000 households in the area and it is seen that the great bulk of these, nearly half of them, had incomes between \$1,000 and \$2,000. About 30% of all the households had incomes of more than \$2,000 and about 12% had incomes of less than \$1,000. Since discussions of housing always involve reference to "upper", "middle" and "low" incomes it is convenient also to divide families into these groups.

* If the families in the Toronto area are marked in the order of income

* In the literature of housing these terms have been used with various shades of meaning; since they inevitably occur with considerable frequency in any discussions of housing it would be valuable to possess simple and universal definitions of the terms "low-income family" and "high-income family". In the United States Housing Act 1937 families of low income are defined as those who "cannot afford to pay enough to cause private enterprise in their locality or metropolitan area to build an adequate supply of decent, safe and sanitary dwellings for their use". This attempt to describe the expression in terms of housing supply, the very quantity which is unknown, leaves us about where we started. An even more circumambient definition is that found in Canada's National Housing Act 1944 where a "family of low income" is defined as one which "receives a total family income less than five times the economic rental of a family housing unit required to provide sufficient accommodation for the said family". This is an equally elusive definition and must be criticized on account of its arbitrary acceptance of the generalization that one fifth of income is a reasonable proportion to be devoted to rent.

The Curtis Committee, in its 1944 Report, neatly avoided these terminological pitfalls by simply ranking all families in any given area in the order of income received and then dividing them into three numerically equal sections, the upper, middle and lower income groups. By this procedure the term "family of low income" has a simple meaning that does not have to be explained by reference to some quite unknown facts about housing. By making a separate calculation for each metropolitan area the Committee took account of the realistic consideration, important for all housing appraisals, that income and rental patterns vary in different parts of the country. Where the terms "upper", "middle" and "low" income groups occur in this study they are used in the same sense in which they were employed in the Curtis Report.

received and then divided into three numerically equal groups it is found that the "upper" income group contains all those with incomes of more than \$2,000, the "middle" group all with incomes between \$1,200 and \$2,000 and the "low" income group those with incomes of less than \$1,200. The average income of the middle group was \$1,549 and of the low-income group \$826. These figures refer only to the Toronto metropolitan area where incomes are above the average; for each metropolitan area in Canada there is a different and characteristic distribution of incomes giving somewhat different lines of demarcation between the "upper", "middle" and "low" income groups. In Windsor, Ont., for instance, where there is a more homogeneous type of employment, the middle third was concentrated in 1941 between \$1,400 and \$1,900, while in Saint John and Quebec City the middle third lay between \$1,000 and \$1,500.

In discussing incomes in relation with housing it is necessary to assess the total incomes of households and not only the incomes of the heads of households. Though contributions to the family income made by members of the household other than the principal breadwinner may not be very substantial, yet they cannot be disregarded. On the other hand income figures used in housing surveys and calculations should be based on biological families without lodgers or sub-tenants and without sons and daughters of adult age. For the periods of housing shortage and in areas of low-income and substandard housing it is commonly necessary for a family to shelter additional persons and gain additional contributors to the rent. The inclusion of such contributors may create a somewhat false impression of the real capacity of the family to pay for a self-contained dwelling unit. The income figures employed in this study are based on all those families covered by the 1941 Household Census (a 10 per cent sample) which contained only

members of one biological family without lodgers and without sons and daughters over the age of 24. Within these families it was found that the contributions of those other than the head of the household represented an average 5.3 per cent of the total family income.

For comparison with the 1941 family income figures on which this study has been based there is given in TABLE 15 the percentage distribution of individual income-taxpayers as it has been estimated for Ontario in 1946 by the Department of National Revenue. It is seen that 60 per cent of these individual taxpayers have incomes of less than \$3,000 and 40 per cent have less than \$2,000. No current figures are available to show the incomes of households in the Toronto area.

2.

Proportion of Income Actually Spent on Housing

According to a commonly accepted rule-of-thumb a family can afford to pay one fifth (20 per cent) of its income for housing accommodation, whether this be in the form of rent or as periodic payments for the ownership and maintenance of a house. This standard may be applied to the Table of Income Distribution (TABLE 15) to provide a Table of Rent Capacity (TABLE 16). It is seen that about 16 per cent of the families in the area could be expected to pay more than \$50 a month for housing (those with incomes of more than \$3,000), about 46 per cent could pay between \$25 and \$50, while about 30 per cent could not pay more than \$25 a month.

When the rule-of-thumb is applied to the three main income groups it is found that the average middle-income family could pay a rent of about \$26 and the average low-income family about \$14. In view of these

theoretical levels of rent capacity it is rather surprising to find that in 1941 (the year on which our income figures are based) the official index of rents in the Toronto area, as published by the Department of Labour*, shows that "six-roomed houses with modern conveniences" were renting for \$28 - \$40. and "six-roomed houses with incomplete modern conveniences" were renting for \$20 - \$28. In 1947 rents in Toronto are officially listed as \$32.50 - \$36.50. If it is indeed true that the normal rents being charged for family housing units are theoretically so far beyond the reach of the average middle income family and that a low-income family is theoretically quite incapable of meeting the rent even on a house "with incomplete modern conveniences", then either the theory needs some further examination or the housing situation is a good deal worse than has commonly been supposed.

The belief that families can and usually do spend about one fifth of their income on housing accommodation was supported by the evidence of a Canadian study of family budgets made in 1937 - 1938**. From this it appeared that "families living in rented dwellings spent 20 per cent of total living expenditure for shelter. Those residing in their own houses paid out a slightly lower proportion of 19.3 per cent". From the sample group of 1135 British Canadian families on which the Study was based it also appeared that the proportions of income spent on housing were almost uniform throughout all income levels in the case of tenants, but owners at lower income levels paid considerably less than 20 per cent.

* Labour Gazette July 1941, p. 865.

**Dominion Bureau of Statistics. "Family Income and Expenditure in Canada 1937-1938" (King's Printer, 1941.)

But the evidence supplied by the Curtis Report in 1944 by no means supported this belief. The far larger sample of the population covered by the 1941 Census showed that low-income families in all urban areas had to pay a rent far beyond their theoretical capacity and even middle-income families paid considerably more than a fifth of their income. Furthermore it appeared that rent levels in the Toronto area were particularly high in relation with income. Low-income families, instead of paying the average \$14 which was their theoretical capacity, were in fact paying almost twice that amount, an average \$25; this was \$5 more than was being paid by low-income families in Ottawa, Hamilton, London and Windsor. Middle-income families in the Toronto area were paying only \$3 more than their theoretical capacity of \$26; here the discrepancy between theory and practice was only slightly more marked in Toronto than in other metropolitan areas. In Montreal and Windsor middle-income families were in 1941 actually paying less than their theoretical capacity. (See Tables 17 and 18)

There is an unmistakable relationship between income levels and the proportions of income paid for rent. Toronto families with incomes between \$1,500 and \$2,000 have been paying on the average, 21 per cent of their income for rent. Those with incomes between \$1,000 and \$1,500 have paid about 25 per cent and those with less than \$1,000 a year have averaged about 40 per cent of their incomes in rent payments. It must be concluded that the rule-of-thumb concerning rent capacity has arisen from a generalization that oversimplifies the facts. It may be true that the statistical average of all rents paid by families of all incomes does represent about one fifth of the statistical average of all incomes. But this may well occur if the excessive rents paid by low-income families are balanced by the relatively easier rents

paid by high-income families.

A fundamental cause of variations in the relationship between incomes and rents is the size of the family. A childless married couple obviously does not have to spend such a large proportion of its budget on food and clothes as the parents of four growing children must spend; they can consequently afford to spend considerably more on their housing accommodation. To a lesser degree the parents of a six-year-old only child have more rent money available than the parents of two 'teen-age children, though the family incomes may be identical. Unfortunately it is the families with more children which need more housing accommodation; to obtain more rooms for the same amount of money a family must be prepared to accept a lower standard of housing - fewer modern conveniences, smaller rooms and a less desirable neighbourhood. With the need to keep a growing family fed and clothed at current costs of living it is usually necessary for housing standards to be relaxed. So a continual demand is maintained for the city's obsolescent stock of housing in spite of its lack of modern conveniences and neighbourhood amenities.

The relationship between family size and rents is demonstrated on TABLE 19, showing the rents paid by different types of family at three different income levels. It reveals that the costs of raising children do in fact have a marked effect upon rent capacity. Childless families have paid four or five dollars more for rent each month than families with two children, while families with two children paid two or three dollars more than those with four children. It should be pointed out that since larger families require more housing space their rental funds have to be stretched further. The fact that larger families have paid less rent is therefore only a partial indication of the lower standards of housing which child-raising necessitates. Families with more

children not only paid less rent but with that rent they needed to buy more housing accomodation.

It was, of course, the recognition of these very familiar truths that led to the introduction of "Family Allowances" in Canada. These payments to some extent compensate parents for the fact that in our economic system the reward which a man receives for his labour bears no relation to his family expenses or to the contribution he and his wife make to the State by raising a family. Family Allowances have done a great deal to reconcile the facts of competitive economy with the equally real facts of household economy. The figures in TABLE 19 are derived from the Census of 1941, the year previous to the introduction of Family Allowances; no record yet exists of the effect which these payments have had upon the relationship between family size and rents paid. It may be assumed that a Family Allowance is a contribution to the total family income, to be distributed pro rata amongst the item on the budget; on this basis one fifth of a Family Allowance would be a contribution towards rent. The average allowance is \$6.00 per child per month of which \$1.20 may be regarded as available for rent. It can be seen that Family Allowance payments do not, therefore, offset the recorded differences of rent actually paid by a larger families.

On TABLE 19 figures are shown for rents paid in the whole metropolitan area and also for the City of Toronto itself and the suburban municipalities or "fringe" area. From this it appears that housing accomodation within the city itself was considerably more expensive than in the suburbs. Families of the same size and income have to pay four or five dollars more each month to live within the city. However, if the family wage earner living within the city could walk to his place of employment and so save costs of

transportation this differential would be about offset. (64 rides on a Toronto street-car cost \$4.00). But this certainly does not place suburban and city districts at parity because there are comparatively limited areas within the city from which it is possible to walk to a place of employment; also, from the family point of view, the suburban areas offer far more attractive environment in which to raise children.

3.

Rents And The Family Budget.

Amongst upper-income families, where there can be considerable flexibility in the budget, it is entirely a matter of choice and convention how much is spent on housing. The fact that such families customarily spend about the same proportions of their incomes on housing can only be attributed to the conventional attitudes of people and their tendency to conform with the 'mores' of the society in which they live. In order to become identified with a community it becomes necessary to accept its standards of normal behaviour. One must dress in a certain way and be able to produce certain evidences of the social status to which a family aspires. It may even be regarded by some as necessary to possess a certain quality of car, certain kinds of household furniture and some liquor. By allocating its available resources in certain proportions amongst the competing demands upon the budget it is possible for a family to approximate most closely to the normal standards of the society in which it is placed. The upper-income families which habitually spend about one-fifth of their income on housing do not do so on account of economic necessity but on account of social conventions which place a restraint upon the potential

flexibility of their budgets. It should be recognized that it is only the acceptance of such conventions which prevents a comparatively well-to-do family from spending an unusually large proportion of its income on buying, for instance, fine paintings or a valuable grand piano or a sailing boat or an abnormally expensive professional education for the children. There are indeed many objectives in life more to be applauded than conformity with accepted conventions.

But the smaller the family's income the less flexibility can there be in the proportions spent on food, clothing and shelter. At the lower levels of income the household commodities purchased approximate more and more closely to the bare necessities of living and finally reach an irreducible minimum if life is to be maintained at an adequate level of health and decency. When low-income families have to make an excessive expenditure on housing, to such an extent that the remaining funds are insufficient to maintain a family's standards of health, then this becomes a matter of public concern.

Let us suppose, for instance, that at current costs of household commodities a family of two adults and two children requires \$100 a month to maintain an adequate standard of living, exclusive of rent. This standard could be maintained if the family had an income of \$125 a month (\$1500 a year) and paid not more than a fifth of its income (\$25 a month) for rent. But if the family had to pay \$35 a month for rent it would be \$10 short on its monthly household budget. The situation would, however, be much more critical if the family's income dropped to \$100 a month for at that level it would not even be possible to pay the theoretical one-fifth of income (\$20 a month) and at the same time meet the required living standard at \$90 a month. It is evident, in fact, that there is a critical income level below which the

familiar rule-of-thumb must be applied with considerable discretion. This critical margin is at a different level for families of different sizes and rests upon the recognition of a "standard" of living. Is there any such recognized standard against which it is possible to measure deficiencies and requirements? What significance can be attached to such arbitrary standards in planning the solution to Canada's housing problems?

The definition of a standard of decency and health is no easy matter because at every income level people will habitually declare that they could not possibly get along with less. While the possession of an additional slice of bread might be regarded as relative affluence by a starving European, yet a Canadian may feel that he is suffering some deprivation if he cannot purchase an additional bottle of rye whiskey. Standards of judgement change with the fluctuations of culture and the circumstances of the time and environment. Some may even doubt whether our kind of civilization has really raised living standards. Is it possible that the peasant family, breathing clean air and eating the fresh fruits of the land, had a richer life than the crowded inhabitants of the present industrial city?

Before the war the League of Nations made some attempt to define minimum standards of civilized living, particularly with reference to nutrition. The United Nations Organization is making similar attempts. While in the present unstable condition of the world it may not yet be possible to recognize standards common to many different races and environments, yet within our own more or less homogeneous society we are free to define our own minimum standard of living and can compute its cost. Canada has, in fact, gone a long way in this direction. All our measures of social security, all the striving to

raise wage-rates and maintain a balance with the costs of living, all the health and welfare services of a community, all these efforts are inspired by a tacit belief that there is a decent manner of living with which our neighbours and fellow-citizens should be able to conform. We are moving towards the definition of a standard. It is not the bare minimum on which human life can be sustained and work performed, a standard measured in minimum calories and minimum shelter. It is a standard on which a family may live with the dignity appropriate to citizens of a thriving metropolis.

In 1938 the Welfare Council of Toronto undertook a detailed study of the cost of living in the city in order to provide "one standard by which to measure the adequacy of income and to analyse the way in which it is being spent". A report was published in 1939, a revised edition appeared in 1944 taking account of the price changes that had occurred in the intervening years and amendments have been published for May 1947 (TABLE 21). This important document has received national recognition and may be regarded as this community's attempt to determine a standard of living. It is not too liberal a standard. The sums allocated to food expenses necessitate expert housewife management. The allowance for medical and dental care is admitted to be inadequate, no provision has been made for maintenance in old age and the savings allowed are modest in relation with the unforeseeable needs of family emergencies. The provision referred to as "Advancement and Recreation" permits of only a narrow range of interests. And finally, a somewhat serious limitation, the budget assumes that the household is already a going concern in possession of a stock of furniture and household equipment; for newly married couples who are starting to keep house the present cost of acquiring those essential simple possessions is a familiar and heavy item on the budget.

The cost of maintaining the standard of living established by the Toronto Welfare Council is shown, in its simplest form, in TABLE H. Approximate figures are shown for families of various sizes with adjustments made for the price changes between 1941 and May 1947.

T A B L E H
MONTHLY COST OF MAINTAINING STANDARD OF LIVING SET BY TORONTO WELFARE COUNCIL
(EXCLUDING RENT)

FAMILY SIZE	1941	1944	1947
2 adults only	\$ 61	\$ 67	\$ 74
" and 1 child	80	87	97
" and 2 children	96	105	117
" and 3 children	113	124	139
" and 4 children	131	144	161
" and 5 children	148	162	183

These figures, however, are merely generalizations since the cost of supporting actual individuals varies with their sex and age and therefore families of the same size may have widely varying minimum costs. Age variations cause much wider cost differences than sex. The cost of living for persons of either sex increases with age until maturity and remains substantially the same through the prime of life, declining ultimately with the relative inactivity of old age. Sex introduces a quite minor variation. Boys, as a rule, eat more than girls, and wear out more clothing in their younger years, although after the age of seventeen a girl's clothing requirements are more expensive than a boy's. Similar variations apply to adults. A working man occasions more expense than his wife on food and clothing. He must also save more, since a proper minimum budget should permit the breadwinner of a family to carry life insurance.

Although the sex of children may not have a very substantial influence on family expenses yet the age composition of the family may vary costs considerably, to such an extent that a family having a number of children in the lower age group is actually less expensive to maintain than a smaller family with older children. For instance, three children aged two, four and seven can be maintained at less cost per month than two children aged fifteen and seventeen. This may be rather an illusion, however, for in ten years' time the larger family will have greatly increased expenses, whereas ten years earlier the smaller family enjoyed the cheaper costs of children in the lower age groups. When the family living costs are viewed over a long period of time, as they must be in any calculation of living costs, the factor of age composition loses its importance as an influence on total expenses. It affects the distribution of costs in time but not their total amount. In the long run family size exerts an effect on total family expenses that is not influenced by the age distribution of a family. It is appropriate therefore to think of family size as the principal determinant of family living costs, and to think of all families of a given size as having the same age distribution. This procedure at least simplifies the analysis and focuses attention on the more important considerations.

TABLE J

ANNUAL INCOMES REQUIRED TO SUPPORT FAMILIES AT TORONTO STANDARD OF LIVING

FAMILY SIZE	A Annual Costs of living (Less Rent)	B Proportionate Rent (one quarter of A)	C Total Annual Expenses (A plus B)	D Income Required (without Family Allowances)
2 adults only	\$ 888	\$222	\$1,110	\$1,110
" , 1 child	1,164	291	1,455	1,381
" , 2 children	1,404	351	1,755	1,606
" , 3 children	1,668	417	2,085	1,862
" , 4 children	1,932	483	2,415	2,141
" , 5 children	2,196	549	2,745	2,430

On the basis of the family budgets shown on TABLE H we are able to formulate a statement of the annual incomes that are required by families of various sizes in order that they may be enabled to live at the desirable Toronto standard without paying more than one fifth of their incomes for rent. Since Family Allowances represent a substantial supplement to incomes a distinction has been made on TABLE J between the total expenses that must be met and the actual income required to meet those expenses. A family with two children, for instance, would have annual expenses of \$1,755 to maintain the standard but, in view of the receipt of Family Allowances, would require an earned income of only \$1,606. With four children the cost of maintaining the standard and paying proportionate rent would be \$2,415 and the earned income necessary would be only \$2,141. From this it is evident that the introduction of Family Allowances has brought within reach of the Toronto standard a very large number of families who would otherwise have had to reduce their budgets either for housing or for other household necessities.

In order to give an accurate statement of the earned income required to maintain the Toronto standard of living it is necessary to make a still further adjustment for income tax. Gross incomes are subject to a tax which varies with the level of income and with the size of the family. When incomes are transformed by income taxes and by family allowances they yield the figures shown on TABLE 22. The column on the left side of this Table represents successive levels of earned or gross income and the figures opposite, on each line, indicate the actual incomes received by families of various sizes when the necessary adjustments for family allowances and income tax have been made. It is on these adjusted income figures that budgets and rent capacities must be based.

At lower income levels, where income tax is not effective, Family Allowances increase earned incomes by the full extent of these payments. At upper income levels, where Family Allowance payments are negatived by income tax, the available income is, of course, less than earned income. But in between these two are the middle income families which both receive an increment from Family Allowances and are also subject to income tax deductions; for each family size there is an income level at which these two adjustments cancel one another out and leave earned incomes just as they are, unaffected by either Family Allowances or income tax. Families above this line have spending incomes less than earned incomes, while families below this line have more funds available than were earned. On TABLE 22 this line of demarcation is indicated by the upper and broken line.

Considerably lower than this line of demarcation is the minimum level of adjusted incomes at which families of various sizes are able to support Toronto's basic standard of living and also pay 20 per cent of their

income for rent as this has been shown on TABLES H and J (and in greater detail on TABLE 21 for a family of 2 adults and 3 children). This is a datum line of considerable significance in our study of family capacity to pay for housing. It is a broad delineation of that margin below which housing costs become dangerously excessive. For it is argued that families which fall below the standard line are placed in an untenable position; if they have to pay a fifth of their income for rent they cannot at the same time live up to the standards of health and home management which the people of this community expect. The struggle to maintain these standards must inevitably set up stresses on family health and behaviour. It is largely these physical and psychological stresses which give rise to the high incidence of ill-health and delinquency in low-income housing areas; it is the nature of the family's economic situation as much as the poor quality of the housing itself which produces those maladies so expensive to the community.

If it should be regarded as the ultimate goal of this community to enable all its families to achieve the standard of living that has been defined by the Toronto Welfare Council, then it would be necessary to revise the generally accepted belief that even the lowest income families can afford to pay one fifth of income for rent. It may, in fact, be argued that the true rent capacity of these families which fall below the standard line on TABLE 22 is not one fifth of their incomes but only what remains after the costs of maintaining the standard of living have been met. On TABLE 23 this distinction has been made. This Table gives the same distribution of incomes and family size that is shown on TABLE 22, but the net incomes have here been converted into rent-capacity (one fifth of the figures for net income). Below the standard of living datum line a second figure is entered in brackets, this being in each case

the balance remaining after the standard costs of living have been paid. A family with three children, for instance, and an earned income of \$1800 would have to pay a monthly rent of \$33 in order to conform with the one-fifth-of-income formula; but if this family lived up to the desirable Toronto standard it would only have \$25 a month remaining for the payment of rent. With the addition of another child to the family the theoretical rent capacity would increase to about \$34 on account of Family Allowances received; but if this family continued to conform with the living standard its ability to pay rent would really be reduced to about \$10 a month.

Apart from those families whose incomes and size definitely place them below the margin of the standard line, it must be recognized that any near approach to this line may place a family in precarious circumstances. For the Toronto standard is not one that establishes a generous or ample life but one which requires considerable perseverance and conscientious management on the part of the housewife. Any serious hiatus in earnings or any unforeseen call upon family finances would entirely upset the budget. Take the case, for instance, of a family earning the average industrial wage in the Toronto area (\$34 a week, January 1947) giving an annual income of \$1,768. On the birth of their first child the parents might well feel that they were able to buy a small house and might undertake to pay off a mortgage at the rate of \$28 a month which would be well within their capacity. On the birth of a second child this cost would still be manageable but a third child would be a rash undertaking; it would place the family well below the margin of safety and wipe out any reserves there might be against periods of sickness and unemployment. This illustrates the danger of a housing policy which encourages home-ownership amongst families whose incomes are just theoretically adequate to carry the monthly instalments on a mortgage.

We have attempted here to appraise the real validity of the commonly accepted formula for rent capacity. This formula was never, of course, more than a convenient generalization and we have seen that the lower income families have habitually had to pay much more rent than the formula prescribed. It may be said that the standard of living defined by the Toronto Welfare Council is an equally arbitrary formula which could not possibly be used as a precise basis for determining rent capacity. It must be confessed that the attempt to reduce family needs to a classified budget is a denial of the manifold varieties of human nature. While the desire for security persuades us to accept the conventional standards of our community, the equally vigorous urge for freedom of individual expression makes us all resist such uniformities. The idiosyncracies, vanities, pleasures and generosityesthat make life worth living cannot be accounted for in scientific budgets and economic formulae. But even this cold examination of minimum family needs has shown the many variable factors that must enter into household plans; it is clear that simple generalizations and rules-of-thumb for calculating a family's capacity to pay for housing may be quite misleading. We may at least accept the general proposition that a family should not have to pay so much for shelter that the basic standard of living is threatened. Those who most proudly advertise the economic accomplishments of a great Canadian metropolis must admit that we are yet a long way from having removed that threat.

The Social And Economic Framework Of A Housing Programme.

In planning a housing programme it is necessary to define the principal characteristics of the population for which housing must be supplied. One type of society may be characterized by its wide variations of income, while in another the great majority of the people may fall within a comparatively small income range. Or society may be typified by the concentration of large families at low incomes. Obviously such characteristics have a significant bearing upon the types of houses that must be designed and the ability of the community to maintain an adequate supply. An examination of the income and family size structure of metropolitan Toronto's population is an essential introduction to the conception of a housing programme. TABLES 24 and 25 depict the income levels and family sizes into which the population of metropolitan Toronto was distributed in 1941. In TABLE 24 these are expressed as percentages of the total metropolitan family population while TABLE 25 gives a numerical distribution of families. For this purpose it has been assumed that the post war population of metropolitan Toronto contains about 200,000 families as distinct from persons not living in family groups. In 1941 there were 563,000 persons over the age of 25 (in the Toronto metropolitan area) and 419,000 married persons. It may therefore be assumed that there were about 144,000 single persons over the age of 25. To this number may be added a considerable proportion of the 80,000 persons between the ages of 20 and 25 who were not married but who no longer lived in their parents' homes. There would thus be approximately 200,000 single persons in the area living as lodgers or as tenants of apartments, duplexes, etc. The 200,000 families in the area represent

a population of about 750,000 (at an average of 3.76 persons per family). The population in families and the population of single persons together make up the metropolitan population of about 950,000.

On TABLES 24 and 25 it may be seen that the largest concentration is that of the one-child families with incomes between \$1,000 and \$1,500 - nearly 14,000 families or 6.8 per cent of all the families in the area. One may achieve a certain sense of proportion by observing that less than a tenth of this number is found in the group of one-child families with incomes between \$4,000 and \$5,000.

The distribution shown on TABLES 24 and 25 may be regarded as the type of basic social-economic framework on which a comprehensive housing programme for the Toronto area must be constructed. The figures do not include however about 200,000 single persons who do not form parts of family groups but who must be taken into account in order to complete the description of the metropolitan society for which the housing programme must be designed. Since these distribution Tables are derived from the 1941 Census they cannot be used with any validity in combination with 1947 costs of living and costs of housing. For instance the application to TABLE 24 of the standard of living datum line (developed in the previous section of this chapter) would suggest that about 40 per cent of all the families in the Toronto area fall below this line. But the general level of incomes has risen since 1941 to such an extent that not more than 30 per cent of all families are probably below this datum line. If a datum line is established on the basis of 1941 costs of living (shown on TABLE H above for families of different sizes) and applied to TABLE 24 it is found that in 1941 more than 25 per cent of all families in the Toronto area were absolutely below the standard line. It may be assumed that this proportion remains about constant

since it arises from the relationship between incomes and costs of living. It may therefore be said that between 25 and 30 per cent of the families in the area are not able to pay one fifth of income for rent without jeopardizing their standard of living.

The lack of economic and social data applicable to 1947 conditions suggests that there is an urgent need for a large sample survey which would make it possible to construct social-economic tables similar in form to TABLES 24 and 25. Without such contemporary evidence it is impossible to measure the real limits of the community's housing problems. Unless the community's present capacity to pay for housing is known with some degree of accuracy it is extremely difficult to plan a programme which would accomplish the desired results.

With the limited knowledge at our disposal it is possible to make certain broad generalizations about the framework of a housing programme for the Toronto area. For this purpose the population may be divided into four principal groups:

- (a) Families who have at least one child and whose incomes enable them to buy the kind of house they need.
- (b) Families who have at least one child but whose incomes do not enable them to buy a house though they are able to pay one fifth of their income as rent.
- (c) Families who have at least one child and whose incomes and family size prevent them from paying a proportionate rent and also maintaining a desirable standard of living.
- (d) Married couples without children.
- (e) Single persons not living in family groups.

(a) FAMILIES ABLE TO BUY NEW HOUSES

As a basis for calculating the number of families who can afford to buy a new house let us assume the minimum cost of a dwelling to be \$6,000 and let us assume the ability of families to make cash payments of \$2,000; the cost of the principal and interest on a National Housing Act loan together with the payment of taxes on such a house would then amount to about \$34 a month. Group (a) therefore contains all those families with children who are able to make monthly payments of at least \$34. A study of TABLES 23, 24 and 25 indicates that about 33 per cent of all the families in the Toronto area, or about 66,000 families, may be in such an economic position. This might be regarded as an underestimate in view of the general rise in incomes between 1941 and 1947; but this may well be offset both by the limited number of families who have been able to retain savings of \$2,000 during a period of high living costs and by the difficulty of obtaining a new house for \$6,000. The estimate cannot therefore be very far from the truth.

It is upon the economic demand of this group of families that the community depends for the supply of new single-family homes built for owner-occupation. It must be recognized that a large number of these families, perhaps the majority, are already quite adequately housed and only the remainder offer the effective demand for new houses. Even if a third of all these families, about 20,000, were to buy new houses during the next ten years it can be seen that this supply would not go very far towards supplying the estimated need for 50,000 additional units.

(b) FAMILIES ABLE TO PAY PROPORTIONATE RENT
BUT NOT ABLE TO BUY NEW HOUSES.

With a lower rent-capacity than Group (a) are those families with children which can afford to pay one-fifth of income for housing while retaining a desirable standard of living, and yet they are unable to contemplate the purchase of a new house at present prices. Together with those in the first group they can pay an economic rent and are in line to occupy the used housing handed down to them from Group (a) as the post-war home-building programme proceeds. About 15 per cent of all families in the area (about 30,000 families) are in this category.

(c) FAMILIES UNABLE TO PAY PROPORTIONATE RENT AND
MAINTAIN A DESIRABLE STANDARD OF LIVING.

Of all the families with children we are then left with those who fall below the standard line which has been established. Upon these families fall the greatest household problems in their attempt to raise children under suitable conditions. This group contains all the families with

1 child, an income below	\$1,400,	a rent capacity less than	\$25
2 children, " "	\$1,700,	" " " "	\$30
3 children, " "	\$2,000,	" " " "	\$36
4 children, " "	\$2,300,	" " " "	\$40

This group may represent about 30 per cent of all the families in the area and may embrace about 60,000 families. These families cannot occupy new accommodation either by ownership or rental and are dependent upon the existing stock of housing supplied by previous generations of house purchasers and handed down for their use. In a period of housing shortage this is the group most tightly pressed because there is not enough housing to be handed down for their use and the rents of the available stock are maintained at a level beyond their real capacity.

(d) MARRIED COUPLES WITHOUT CHILDREN

About 22 per cent of the families in the area are married couples who either have not yet started to raise a family or whose children have already grown up and left the home. These childless families (about 40,000 in number) are normally tenants in apartment houses or duplexes. Their needs do not stimulate the production of new houses for owner-occupation; they are dependent upon the supply of rental housing. Although their housing requirements are not so immediately pressing or so inflexible as those of families with children yet appropriate accommodation must be provided in the neighbourhood communities of which they form an integral part.

(e) SINGLE PERSONS NOT LIVING IN FAMILY GROUPS

In addition to the families with and without children there are about 200,000 individual persons in the area who have to be housed either as lodgers or in non-family household groups renting apartments or duplexes. Like the married couples without children they do not help to stimulate the production of houses for owner-occupation. As lodgers some help to supplement the rents of families and some keep professional lodging-house operators in business; the more effective earners are able to occupy apartments. This is a fluid element in the rental population, inclined to move frequently under changing income circumstances and on account of impermanent social attachments. In periods of full employment, as during the war, the economic demand of this group placed additional pressure on limited housing accommodation; in periods of recession this is the most vulnerable part of the population and the withdrawal of its effective demand causes vacancies in rental housing.

CHAPTER V

HOUSING SUPPLY

This study began with an attempt to define the objective of a housing programme; assuming that it is the aim of housing policy to provide decent accomodation for every household in the area, calculations were made to show the number of additional units and the number of replacements required in the Toronto area. The prevailing economic conditions under which this task would have to be carried out were then reviewed; on the one hand are the costs of producing housing of adequate character and on the other hand are the financial capacities of the families for whom the housing must be supplied. We are now left with the resultant problem, "How is the community's need for housing to be satisfied?"

1.

Theory Of The Housing Market.

The amount of new housing which a community obtains is normally governed by the forces of supply and demand which create the "housing market". Although this economic process is similar to that which governs the price and output of other goods and services, yet the housing market is subject

to such a multitude of conflicting and variable influences that it is not at all easy to define its operations in simple terms or provide a facile explanation of what is happening or what may cause a failure of supply. This difficulty arises largely because money spent on housing is really divided between two separate but closely related markets, that for old and that for new housing.

Whenever the costs of new housing increase, money is withheld from that market and flows back into the market for old housing, raising the prices and rents of old houses. Conversely when the costs of producing new houses decrease, then money flows back into that market and the rents of old houses tend to decrease accordingly. Or expressed in another way, it may be said that whenever the amount of money spent on living in old houses is, on the average, high in relation to the cost of constructing a new dwelling, then the supply of new houses will respond and, as the total number of units increases, rents will gradually decline until a kind of equilibrium is established. It is a recognition of this economic principle that, in our present housing shortage, has led some people to advocate that controls on rents should be removed so that demand would shift from the old-housing market into the market for new housing and so the building of houses would be accelerated. (To bring this about without a general raising of income levels would imply, of course, that families would have to pay a larger proportion of their incomes for housing and would consequently have less to spend on other household needs). In such a free situation an equilibrium would be established when rents had levelled off with the prices of new housing. For it should be realized, of course, that the kind of equilibrium which arises through such a free interplay of the two housing markets, the old and the new, is an entirely economic equilibrium, tending to balance off the price of old housing with the price of new housing. It is not an

equilibrium established between the numbers of dwelling units and the numbers of families or households. If the cost of constructing new housing is very high and beyond the reach of all but a small proportion of the community, then production might be cut off long before a shortage had been overcome, leaving rents balanced off at an equally high level. For in this relationship between the prices of old and new housing, it is the price (or rents) of old housing which is the variable or flexible element while the price of new housing is a relatively fixed quantity based on the costs of labour and materials.

The operations of the housing market may also be described in a somewhat different way. The residential construction industry, responding to the demand of those who can afford to live in new houses, has had to devote itself almost exclusively to filling the requirements of the comparatively well-to-do families. As these families have moved into new houses in new neighbourhoods they have sold or rented their old houses for the occupation of those in lower income levels. There has thus been a continuous flow of new housing into the possession of the upper third and a continuous recession of older dwellings down the social scale. This has been called the "filtering-down" process. It is argued that the normal and most economical way of housing low-income families will always be through the construction of new housing for those who can afford it, on the assumption that they will vacate equivalent accommodation which can then be occupied by families with smaller incomes. In practice this procedure has not always worked satisfactorily because the rental values of old houses have not been consistently and proportionately reduced in the process of filtering down, with the result that low-income families, as we have shown in a previous Chapter, have habitually had to pay more than they could afford for their accommodation. In a larger sense it may be said that the filtering-down

process has demonstrably not proved satisfactory; the flow of houses down the scale has not been of such volume that it has been possible to take the oldest houses out of circulation and move low-income families into more contemporary accomodation. This must be, after all, the crucial test of the adequacy of housing supply in general and of the filtering-down process in particular.

From whatever point of view one may examine the complex and somewhat obscure operations of the housing market, it is at least clear that all new housing must be paid for ultimately out of the incomes of households in the community. The amount of new housing construction is in fact directly related with the national income. This can be clearly seen in TABLE 26 where levels of national income and the volume of residential construction are shown for the period 1919 to 1941. The two indices rise and fall more or less together; when national income has been higher there has been more housing produced; On TABLE 26 are also shown the movements of building costs; though these have tended to move in the same periodic cycle as the other indices yet the changes in building costs have been far less marked than the fluctuations in income and volume of construction. The fact that building costs have fluctuated less than income has created a varying differential between the two; it is this changing relationship between costs and incomes that has largely determined the extent of the market and has caused the periodic changes in volume of construction. One would expect to find that more new housing would be built whenever incomes were high in relation with building costs. TABLE 26 confirms this expectation. The volume of new construction has in fact reacted very violently to this relationship between costs and incomes, giving a peak of production in 1928 and a trough in 1933.

The proportions of the market for new housing are determined by the numbers of households which can afford the current costs of production. Normally it has been during periods when the upper income group has been receiving relatively higher incomes that residential construction has been stimulated and so all economic levels have benefitted from the increased supply through the filtering down process. On the analogy of the market for automobiles it may be argued that the raising of incomes at lower economic levels would have substantially the same effect, for their improved economic circumstances would enable them to offer the well-to-do more for their second-hand houses as they offer more for second-hand cars; this would theoretically reduce the cost of new housing for the well-to-do since their expenditure may be considered to be the cost of a new house less the price or rent obtained for the old one. This consideration leads to the conclusion that a rise in the income of the community as a whole, however it may be distributed, must have the effect of stimulating construction and so directly or indirectly benefitting all classes. The significant feature in the creation of the housing market would therefore seem to be the average of all family (or household) incomes or, more precisely, the relationship between this average and the current cost of paying for the construction of a new house.

But this academic interpretation of the housing market does not reflect actual experience. It is true that families which can afford to do so, frequently buy a new car every year or two; that is an easy turnover to make. But a home containing all the household effects and neighbourhood associations is a long-term possession and a family will not usually buy a new house more than once during its existence as a family group. Even though there may be a strong demand for second-hand houses by those just below the market for new houses, yet

families already quite comfortably housed will not respond to this demand by obligingly moving out and building new houses.

The fact is that the new housing market is limited not only to those who can afford a new house but is normally limited also to those families which are in the process of establishing themselves as family groups. This is an important limitation. For supposing a third of the families in the community had incomes which would enable them to buy new houses, this would not mean that a third were "in the market" since many of those families are already quite comfortably established and have no reason or inclination to move. It would be nearer the truth to state that the market for new housing is limited to those who are positively seeking or needing housing accommodation and also have the financial ability to occupy a new house.

In comparing the housing market with the markets for other kinds of durable commodities another consideration arises at this point. People are induced to buy new cars and clothes and household equipment not only because what they already possess is worn out but because new products are more efficient or more attractive or more fashionable. The whole battery of the advertising business is brought into action to create a desire and a market which might not otherwise exist. It would perhaps be fair to say that the type of house which the building industry has recently been able to produce in Canadian cities has been so lacking in fine qualities or architectural design that there has been little to attract buyers beyond the bare necessity to acquire a house. The large potential market for all those who can afford a new house, a number far in excess of those who need a new house, has been very inadequately exploited. People only want to buy new houses or live in new apartments if the accommodation is more spacious, better planned and in a more

desirable neighbourhood than where they already live or if the new accommodation is superior to any older dwelling unit which they may be able to obtain. Unfortunately the building industry has failed to improve its products to such an extent that new houses offer sufficiently evident advantages over older houses; there have certainly been advances in the design of the mechanical equipment for heating, ventilating, cooking and cleaning but the space, structure and character of new housing cannot be compared very favourably with the products of a previous generation. It is certainly fair to assume that with the aid of skilled architectural designers and imaginative neighbourhood planning it would be possible to attract into new housing areas many households which at present find the amenities of the older parts of town more congenial. New neighbourhoods have been brought to completion in an altogether too haphazard, piecemeal manner and during the process of development have been exposed to all kinds of uncertainties and risks in the provision of services. To buy and move into a new house has not therefore seemed to be a particularly attractive undertaking.

In the interests of the whole community it is most important that the full potentialities of the economic housing market should be exploited. Those who are in a financial position to buy a new house must be encouraged to do so rather than buy old houses and thereby place a heavier load of housing production on those who can less well afford it. As the shortages of materials and hazards of building ease off during the coming months it may even be regarded as the obligation of certain families to initiate home-building. But in order to expand this market the joint efforts of the builders, the architectural profession and local Planning Boards will have to be enlisted in order to modernize the products of the building industry. The new single-family home and its setting must be made an altogether more desirable possession.

It has been suggested in the previous chapter that there are about 66,000 families in the Toronto metropolitan area who might be able to meet the cost of living in a new dwelling. It certainly cannot be assumed that at some time during the next ten years every household in this top income group would be directly or indirectly responsible for the construction of a new housing unit to give an average annual production of 6,600 units. It would in fact be most optimistic to anticipate a market for more than half this amount even if the building industry could produce a house of the most revolutionary character which would push the market to its limits.

But metropolitan Toronto needs to produce additional housing units at the rate of 5,000 a year during the next ten years. It must also embark upon a programme of replacements.

2.

Subsidies To Supplement The Housing Market.

It is fairly evident that the market for new housing will not be sufficient to fill the entire needs of the community. Building costs and the distribution of income offer fairly well-defined limits to the market. By some means or another these limits must be changed.

Some expansion of the market may undoubtedly be brought about through technological research leading to better methods of construction and a more economical organization of building operations. In the public mind prefabrication offers the most hopeful prospects of revolutionizing the relationship between incomes and housing costs. But up to now these hopes have proved all too elusive. One of the most eminent authorities on building technique,

Professor Walter Gropius, has said: *"People look upon prefabrication as an entirely revolutionary idea, but from very extensive experience with prefabrication - I began my experiments in 1910 - I have come to see it as a slow, evolutionary break, despite all the misleading advertisements promising John Doe a Sunday-magazine miracle-house when he comes back from the war".

If reductions in construction costs alone cannot bring about an adequate volume of production, then it becomes necessary to consider how the income factor might be modified. The general level of incomes is, of course, a matter beyond the province of housing policy, as such. Those who are concerned with housing policy obviously cannot influence either the total income of the community or its distribution; these are determined by economic factors most of which are quite independent of housing. Nor, in the light of what has been stated above, would it be wise to advocate that families should spend a larger proportion of their incomes on housing - certainly middle and low income families could not be expected to do so. But even if it is not possible, through housing policy, either to raise the community's total income or increase the proportion of income spent on housing by lower-income families, yet it is possible to influence the income factor in one most important respect. This may be done through a system of housing subsidies, a system which has been extensively practised in other countries faced with a similar situation. (The fact is, of course, that the inadequacy of family income in relation with the costs of housing accommodation is a phenomenon not peculiar to Canada alone but is a characteristic of industrial civilization as a whole). In other countries, notably Great Britain and the United States, the state has entered directly into the housing market to subsidize the rental payments of low-income families who

* Walter Gropius Rebuilding Our Communities - (Paul Theobald, Chicago, 1945).

could not otherwise afford the housing accomodation constructed for their use. The nature of the economic process which thus takes place may be briefly explained as follows:

The public funds required to pay housing subsidies must be raised through taxation and therefore represent reductions in the incomes of upper-income families. Left in the possession of these taxpayers some part of the sum thus raised, possibly a fifth, would perhaps have been spent on housing; but most of it would have been spent on other items of their household budgets. Transferred to the state, however, the whole of this particular revenue can be concentrated upon the production of housing. The usual method of applying this subsidy fund is by annual payments made towards the cost of rental housing constructed for the occupation of low-income families; the subsidy payments plus the rent revenue are together sufficient to meet the total costs of such housing. Without such supplements to the incomes of these families such new housing could not be brought into production because these families are not in the economic market for new housing. In this way although the total income of the community has not been changed, yet there has been an increase in the proportion of that total income available for the production of new housing.

The purpose of a subsidized housing programme is to increase the supply of housing units at any time and under any circumstances when income levels are insufficient to meet the current costs of housing construction and the necessary volume of production cannot therefore be maintained. A study of the facts concerning income levels and costs seems to suggest that such a situation is chronic and that a failure of the housing supply in Canada, and in Toronto particularly, will arise before the present shortage has been overcome. A system of housing subsidies may thus have to become a most important

instrument in the hands of housing policy-makers since it provides a well-~~tried~~ means of increasing the supply when technological improvements have reached their limit in reducing costs. Whatever may be the social or ethical arguments for or against a redistribution of incomes it can at least be said that a properly administered system of housing subsidies offers one method of abbreviating a housing shortage. Furthermore a subsidy used to supplement purchasing power and so bring more customers into the housing market is likely to disturb the normal operations of a country's economy considerably less than that other form of stimulant, a subsidy paid to the producers of building materials. This latter form of subsidy, besides being extremely difficult to operate without insidious choices of recipients, may influence the market price of certain commodities without insuring that the additional amount of housing accommodation so created will actually be commensurate with the amount of subsidy paid. The undoubted advantage of a subsidy paid directly to supplement rents of low-income families in housing constructed for the purpose lies in the fact that the subsidies need only be paid as and when the additional housing units actually come into existence.

The fact that housing subsidies may be used to increase the production of housing units, and so benefit the community as a whole, is a thesis that may be accepted quite apart from the question as to who should be the immediate beneficiaries of such subsidies and rent benefits. The policy determining rent levels and the selection of tenants may arise out of the particular circumstances under which a project is constructed. During the course of time a community's housing programme may pass through several phases in each of which it may be appropriate to give priority to different categories of households. During the war, for instance, the public housing projects of

Wartime Housing Limited were specifically reserved for the accomodation of the families of workers in key industrial plants. Following the war, Wartime Housing Limited has given priority to the families of veterans with children. During subsequent phases of the programme it will probably be necessary to give priority to families to be removed from slum areas of the city. Other circumstances, at present unforeseen, may direct that other groups in the community should be given the benefit of accomodation in subsidized projects, providing always that they are families which could not otherwise finance the production of new housing. In other words it is possible to detach the general principle of housing subsidies from the discussion of the particular way in which they may be applied. In the actual operation of housing subsidies both in Great Britain and in the U. S. they have almost invariably been applied to housing projects designed for families in the low-income group rather than for that very extensive proportion of middle-income families who cannot afford new housing. This has, of course, been primarily because the subsidy provisions and low-rental housing legislation originally came into existence in response to public pressure for an improvement of the housing conditions in slum areas. Before the recent war both British and American legislation contained the principle of "equivalent elimination" to provide that subsidies would in fact only be forthcoming where poorly housed families had been moved from demolished slums and re-housed in better accomodation. But although the British housing subsidies have been administered with this humanitarian point of view, yet the inception of the programme after the previous war, in 1919, had as its principal motive the need to overcome a housing shortage; in a sense the same may be said of the years immediately preceding 1939 when the elimination of overcrowding, the principal manifestation of a housing shortage, was the

objective of all public housing authorities.*

But it is quite logical that objection should be raised to the policy of benefitting the lowest income group through housing subsidies. Why, it may be asked, confuse Housing policy with Welfare policy? Why should the new accommodation provided through the application of subsidies not be used for housing that large element in the middle group whose incomes are not quite sufficient to meet the current costs of new housing but who, with the assistance of a subsidy, would be able to open up a new market for housing production? Would not such a policy be more economical in that smaller subsidies would be required to lift these families above the line at which construction costs are prohibitive? Besides, it may be argued, new housing built for middle-income families can be filtered down to the low-income group but the reverse process cannot take place. In order to justify the application of subsidies to the benefit of low income families it is certainly necessary to examine those objections. It may be said, in the first place, that subsidized public housing should not be allowed to compete with the efforts of private enterprise to serve an increasing range of income groups; it must always remain the objective of private enterprise to reduce costs and eventually take over the

* Between 1919 and 1939 over four million houses were built in Great Britain - approximately three million by private enterprise and one million by local authorities. All but 433,000 of the private enterprise houses were built without any kind of subsidy but virtually all those provided by local authorities had been subsidized both by the local authorities themselves and by the national exchequer. The capital expenditure on housing provided by local authorities was £538,000,000. By 1939 the annual subsidy commitment of local authorities was £3,800,000 and the subsidies being provided annually by the national government to local authorities' housing projects amounted to £15,300,000. Therefore the total annual subsidies being paid towards housing low income families of Great Britain just before the war was £19,000,000.

whole of the potential market represented by the needs of the middle-income group. It has seemed, therefore, advisable for public housing to keep well clear of the legitimate field of unsubsidized housing business.* However, the principal objection to offering subsidies for middle-income housing is simply that it would become impossible to define the limits of operation under such a policy. Once the precedent had been set there would be an inexhaustible number of equally legitimate claims for subsidies. By implication half the community would become eligible for such benefits. For this reason experience has shown the wisdom of attaching housing subsidies closely to the concepts of public health and welfare. In this way it becomes possible for public housing to establish its starting point, define the limits of its programme and embark upon a consistent course of action. It thus may become the normal business of public housing to raise the minimum standards in the community by the successive retiring of the most obsolete accommodation in the area and the substitution of modern housing. Even when the immediate situation calls for an absolute increase in the number of units, as well as the elimination of slums, it is still possible for public housing to start from the same point of reference. The use of public funds for subsidy purposes may thus be given a double justification; an economic justification in its contribution to the total number of housing units and a social justification in its preservation of standards of living.

* To prevent subsidized public housing from trespassing upon the territory of private enterprise, the abortive Wagner-Elender-Taft Bill presented to the last U.S. Congress contained the provision "that a gap of at least 20 per cent (should be) left between the upper rental limits for admission to the proposed low-rent housing and the lowest rents at which private enterprise is providing (through new construction and existing structures) a substantial supply of decent, safe and sanitary housing".
 ---- Bill S.1592, Title VII, Sec. 701 (6) (11). 79th Congress 1st Session.

In great Britain and in the United States rent subsidies are paid exclusively in publicly owned housing projects. Houses are constructed and owned by the housing agencies of municipalities and rented at less than economic rentals, the difference between the rent revenue and the actual cost of financing and operating the projects being paid out of public funds specifically voted for that purpose by Act of Parliament or Congress. In order to place financial as well as administrative responsibility upon the local governments and their housing agencies it has been customary also to require that a proportion of the subsidy fund should be raised locally. The New York City Housing Authority may be quoted as an example of the scale of subsidy payments.

*In 1944 the Authority reported that its seven federally aided projects were under contract to receive from the Federal Public Housing Authority annual subsidy payments to the amount of \$1,701,407 which would enable rents to be reduced by an average amount of \$163 per family per year. It is of interest to note that the local Authority, by efficient management, had been able to reduce operating costs and therefore had only claimed an average of \$1,385,251 each year, equivalent to \$133 per family per year.

Most of the cost of providing low-rent housing in the U.S. -- including management expenses, repayment of the development loans with interest, maintenance, repairs, insurance, etc. -- is borne by the tenants themselves. *But the rents that low-income families can afford to pay do not cover the full cost. Part of the deficit is made good by FPHA through a yearly subsidy, called the annual contribution, which is appropriated by the Congress. The

* New York City Housing Authority, 10th Annual Report, 1944.

**Bulletin of the U.S. Federal Housing Authority, National Housing Agency, Washington, D.C.

amount varies from year to year, depending on the amount needed to keep the rentals within the tenants' reach, but for the total programme it cannot run over 28 million dollars in any one year. The most that can be paid to any local authority for a year's operation is limited to a percentage of the project development cost equal to the going Federal interest rate plus 1 per cent. For example, on a \$500,000 project with a percentage fixed at $3\frac{1}{2}$ per cent, the top Federal contribution in any one year would be \$17,500 At least one-fifth of the annual subsidy paid by FPFA must be matched by a local contribution. Both the U.S. Housing Act and the State Laws permit the localities to make their contribution by exempting low-rent projects from taxation, and this has invariably been the method used to meet this requirement."

Various practices have been followed in determining the rents that should be charged. Differences of opinion have arisen among American housing officials over the respective merits and disadvantages of two methods of rent determination. Advocates of what are called 'proportional rents' claim that no specific rent should be attached to any particular dwelling unit but that the rent required should be proportional with the tenant's income. The proponents of the system of 'graded rents' on the other hand, believe that a specific rent should be attached to each dwelling and that rents for identical dwellings should be identical. The term 'graded rents' implies that a housing project should contain various grades or standards of accommodation.

It is true that the proportional system permits a more precise adjustment of rent with a family's economic circumstances; this may even be regarded as the most serious objection to the system since it removes the principal motivation for the effort to earn better accommodation. But the graded rent system ultimately achieves the same general result between broad classes of the community. Under both systems maximum and minimum income levels

must be set for residents in the project in order that those ineligible for subsidized housing may be excluded and so that those unable to meet even the minimum rents of the project may not be admitted. The graded rent system makes it necessary to formulate some policy regarding tenants whose income change. Graded rent projects generally include two or three classes of dwelling, the average rent levels of which vary; tenants may thus be moved from one grade of home to another when their incomes place them in another category. Such movements are only possible when there are vacancies within the projects; it becomes also very embarrassing to require tenants to leave the project altogether when increased income makes them ineligible to remain in the project. The proportional rent system avoids a large part of this problem by making rents adjustable to income. In the United States, however, whatever system of rental adjustment is applied within the public projects there is a maximum income above which no families are admitted or may remain as tenants. This provision which was relaxed somewhat during the war emergency, was written into the federal legislature under which the public housing programme was initiated in 1937.

The proponents of graded rents criticize the proportional systems mainly because these latter feature fairly wide rent differentials between similar types of accommodation. It is maintained that such differentials imply a welfare and relief function attaching to the public housing programme. These critics, although they do not deny the fundamental aspect of public housing as a subsidized service, nevertheless oppose any of its adaptations which permit invidious personal comparisons within projects or which liken it to the granting of relief. The discomforts and stringencies incidental to particular incomes that are too low to provide sufficient food and clothing they regard as the domain of agencies other than public housing bodies.

It seems that a graded rent system, requiring fewer tenant income investigations than the proportional system, is cheaper and more impersonal to operate, although methods of minimizing the expenses and embarrassments attendant upon frequent means tests may be developed in proportional rent systems. England seems to have met with considerable success in the general application of the proportional system, even though a means test is particularly repugnant to the British people.

It is not appropriate here to choose between the systems. Clearly they are not mutually exclusive and any particular local project may blend their features in many ways. The above comparison merely points out some of the difficulties and some of the administrative decisions that must be made in executing public housing policy. Among the chief problems which arise are the following:

- (1) At what maximum income level, if any, should tenants be excluded?

Should there be a minimum income level disqualification?

- (2) Within the project should rents be adjusted to incomes for each individual family, or should equal rents be paid by families occupying the same class of dwelling?

- (3) How are adjustments to be made in respect to tenants whose incomes change considerably, after admission to the project?

- (4) How often should means tests be made?

Most of these decisions can best be made on a local level, taking into account the local prejudices and attitudes. As examples of adjusted rent systems those employed by the Chicago Housing Authority and the Housing Authority of the City of Newark, N.J. are shown in TABLE 27.

The Local Housing Authority

On January 1st 1947 the taxpayers (property owners and long-term lease holders) of the City of Toronto were asked to vote on the following question:

"Are you in favour of the city undertaking, as a low-cost or moderate cost rental housing project with possible government assistance, the clearance, replanning, rehabilitation and modernization of the area bounded by Parliament, River, Gerrard and Dundas Streets known as the Regent Park (North) Plan at an estimated cost of \$5,900,000?"

Of the 47,442 votes cast in answer to this question 29,514, (62.5 per cent) voted "Yes" and 17,928 (37.5 per cent) voted "No". As the consequence of this decision made by the citizens of Toronto there has come into existence the first local Housing Authority established by a Canadian city. Though the Toronto Housing Authority has been charged with the specific task of building and operating a low-rental housing project on the Regent Park site, its establishment sets in motion a method of procedure which may in the future be used in operating other low-rental housing projects supported by rental subsidies. For the operation of the Regent Park project the municipality has itself assumed the obligation to pay the subsidies that will be required in order to bring the rents within the capacity of families who at present live in that part of the city. The only financial assistance which the municipality is likely to receive is a 50 per cent contribution from the Federal Government towards the cost of land acquisition and clearance.

The operation of low-rental housing is virtually a new departure for local governments in Canada; in setting up an organization for this

purpose it is therefore appropriate to benefit from the experience of England and the United States.

In Britain low-rental projects are constructed and administered by local governments. The Costs of these projects are borne (1) by housing subsidies contributed by the central government, (2) by the smaller contributions from the general revenue of the local governments themselves and (3) by the rental payments of the tenants. In order to cover the initial capital outlay, the local governments may issue housing bonds for authorized undertakings or they may borrow from the Public Works Loan Commissioner. Administrative procedures for the construction and management of housing is left very largely to the discretion of the local authorities and practice varies widely throughout the country. While some cities maintain a complete and centralized housing department under a Housing Director responsible for all phases of the housing programme, in other cities housing is administered through several municipal departments with the Estates Committee of the City Council usually guiding the programme as a whole. Where there is not a single Housing Director it is common for the city architect to do the designing and site planning, the city engineer to let construction contracts, the city treasurer's department to collect rents and the city clerk's office to manage tenant-selection and house assignment. Such is the variety of practice that has grown up in different English cities that almost every possible variation of method may be found. In general, it may be said that low-rental housing administration is performed within the departmental organization of the municipality and in this respect differs from the form of organization which may be most appropriate for Canadian cities. It should be observed, however, that, in Britain, the provision of publicly owned low-rental housing has been developed throughout a long period of gradually ripening experience. The methods

that have been developed in the process of a slow evolution may not necessarily be applicable to the circumstances in the city of Toronto where the very first undertaking of this nature is to be a project of very considerable dimensions. The form of organization that has been adopted in U.S. cities seems to provide a more suitable pattern for a housing authority for the City of Toronto. This, in fact, conforms closely with the type of commission with which Toronto is already familiar and which has proved very satisfactory in the operation of public utilities.

Municipalities in the United States began to assume responsibility for low-rental housing under the terms of the United States Housing Act of 1937. There are now 479 local Housing Authorities in existence which administer in all about 669,000 publicly owned housing units. 40 States have enacted special "Housing Authority Laws" and the authorities so established have assumed a fairly uniform character.

These local authorities are not departments of the municipal governments but are semi-independent public corporations with power to issue their own bonds, expropriate property, build and operate housing within the terms of federal and state legislation. Each local authority consists of an appointed board of citizens serving in a voluntary capacity and an employed staff under the management of an official usually known as the Executive Director. In the great majority of States (33) it is proscribed that the Board is to be composed of 5 members appointed by the Mayor of the municipality; there are only minor variations of this system. After the first appointments the members serve for staggered or rotating terms of office. In no case do the members of the boards receive any remuneration except for expenditures incurred in travelling, etc. In setting up these public authorities in relationship with municipal governments in the United States somewhat elaborate precautions were taken to secure the

authorities against political and private influence. In most States it is provided that no member may be either an officer or an employee of a municipality. It is usually stipulated that no member or employee of an authority may acquire any interest in any contract or property associated with a housing project; if he has such an interest it must be disclosed in writing to the authority.

In the majority of States a local housing authority is entitled to own and operate housing not only within the boundaries of the municipality by which it is appointed but also in an area within a specified distance (3, 5 or 10 miles) of the municipality's boundaries. Provision is usually made however that a local housing authority is excluded from operating on the territory of any other major city or town that is within this fringe area. Local housing authorities are also established for County areas.

Though originally created to provide and manage housing specifically for low income families under the terms of the United States Housing Act 1937 (and to assume management of a number of low-rental projects built by the Federal government's Public Works Administration prior to 1937) the responsibilities of local housing authorities have been greatly expanded during the war years when they have been given jurisdiction over permanent and temporary housing constructed for industrial workers and veterans through a number of emergency measures. This housing, some of which is not at present strictly speaking low-rental, now represents more than half of all the units under the management of local housing authorities. (For example the Cleveland Metropolitan Housing Authority administers 4,739 low-rental units constructed under PWA and USHA, 3,745 units of wartime housing and 1,200 veterans' housing units. The Pittsburgh Housing Authority has 3,073 USHA units and 2,389 wartime units. The Buffalo Municipal Housing Authority has 2,271 low-rental USHA units

and 1,215 wartime units." Though there is no coherent public housing policy operating in the United States at the present time it seems probable that the local housing authorities will revert to their former specialized role and that the wartime projects of permanent construction will in the future be administered on a strictly low-rental basis. The construction of further publicly owned low-rental projects has been suspended by the failure of Bill 1592 (known as the Wagner-Elender-Taft Bill) to pass through the last session of Congress.

Although the rent revenues of projects administered by local housing authorities are not sufficient to cover the amortisation and operation costs, yet the authorities have financial security on account of the subsidies paid by the Federal Public Housing Authority (FPHA). For each project that has been initiated the FPHA has contracted with the local authority to pay an annual sum sufficient to compensate for the low rental levels. The municipalities have contributed their quota of subsidy in the form of remitted taxation on public housing property. On account of this security against financial deficit, the local authorities have been able to obtain operating capital through bond issues at a very favourable rate of interest. Under the terms of the USHA the Federal Government offered to loan 90 per cent of the capital required, the remaining 10 per cent having to be raised by loans from financial institutions and private sources. Confidence in the operations of local housing authorities has, however, made it possible to obtain more advantageous financing by increasing the proportion of private financing. For example, the New York City Housing Authority has refunded bonds issued for six of its low-rental projects costing \$45 million as a result of which 85 per cent of the bonds are now held privately with interest rates averaging 2,128 per cent as

against the 3 or $3\frac{1}{2}$ per cent rate which would have been payable on loans made by the federal government. It may be observed also that the financial situation of the local housing authorities has been improved during the war years because tenants able to pay more than the normal low rents have been permitted to stay in publicly owned projects and have thereby increased rent revenues; consequently local authorities have not needed to claim the whole amounts of the FPHA subsidies to which they were entitled.

As so often happens in establishing a procedure appropriate to Canadian conditions, it is found that neither American nor English methods are entirely appropriate. It is possible to adopt the best features of the methods used in both countries. In the case of low-rental housing we may not find it either necessary or wise to divorce a housing authority so completely from the municipal government as is customary in the U.S.; we are fortunate in possessing traditions of integrity and high performance in both our elected and employed city officials. For this reason, in the establishment of Toronto's Housing Authority it has seemed appropriate to utilize the essential form of the American pattern (which has proved to be a very satisfactory type of agency and conforms closely with our own type of public utility commission) but to strengthen its links with the city government. This has been effected by the provision that at least one but not a majority of the members of the Board of the Housing Authority should also be members of the City Council. Also the invaluable advice of heads of municipal departments has already been made available to the Board of the authority; as employed officials of the city, however, they cannot be voting members of that Board involved in responsibility for matters of policy. The desirability of appointing an independent authority does not arise in the slightest degree out of any doubt concerning the technical

competence of the municipality's officials and their staffs. But it seems particularly important that the administration of low-rental housing should be removed as far as possible from the private and political pressures that will inevitable be brought to bear upon operations of this kind. The acquisition of land, the granting of construction contracts and the selection of tenants eligible to benefit from low rents are all procedures that should be guided by a responsible body appointed specifically for the purpose; it is essential that no members of this body should seek political office or personal gain through the decisions that are made. The significant feature of the commission form of organization is the placing of responsibility upon a board of citizens who, without fear or favour, may judge the absolute fairness and impartiality with which policies are carried out by the administrative and technical staff employed by the authority.

It will be the function of the Board of the local Housing Authority to represent the interests of the community as a whole in the administration of the community's publicly owned housing. The members of the Board will not therefore represent special groups or have special obligations. They should be regarded ideally as a team of persons of relatively equal status not dominated by any one of their number. The members of such a Board cannot themselves assume any administrative or executive duties and it is therefore necessary to appoint an executive director or manager to be solely responsible for the conduct of the authority's business. Subject to the approval of the Board the executive director should appoint his own staff and define their duties. Apart from the setting of policies and the approval of their execution neither the Board as a whole nor its individual members should become involved in the administration and routine of the housing authority's business.

In addition to the technical personnel required for the design and construction phases of a housing project the commission will require a management staff to select tenants, maintain relationships with them and collect rents. In view of the special nature of a project intended for the occupation of low income families these duties demand the services of a particularly well-trained and competent type of personnel. In the effort to obtain economies in operation and maintenance costs and in order to achieve the social benefits which are the objectives of a low-rental housing project, the appointment of suitable management personnel will undoubtedly be a vital factor in the success of a housing commission's undertakings. The importance of this phase of the housing authority's activities suggests that the executive director himself must be a person whose experience has not been solely in the field of construction and administration but who has a wide appreciation of the social problems which low-rental housing should be designed to solve.

CHAPTER VI

THE ULTIMATE HOUSING PROBLEM

It appears most improbable that, through the normal operation of the market, the supply of new housing will catch up with the community's needs. There are not enough families with enough income to pay the costs of constructing enough dwellings of the recognized standard. To the solution of this difficulty there appear to be three approaches:

- (1) Through a revolution in building techniques,
- (2) Through the acceptance of a lower standard of housing or a lower standard of living,
- (3) Through a system of subsidies to direct an additional proportion of the community's income into the building of homes.

In 1947 the pinch of the housing shortage is felt keenly by people in all kinds of economic circumstances. It is not confined to households at any one economic level. As the supply of new housing comes in over the coming months and years those in better economic circumstances will be the first to benefit. Even though it is the present public policy to channel as much residential construction as possible into the building of \$6,000 and \$7,000 houses, yet even by this means it will be a relatively privileged section of the community that will be released from the squeeze within the next few years. As the housing market closes in on the margin of its economic potentialities it is to be anticipated that the remaining impact of the shortage will be felt more

and more exclusively by those in the least favourable economic circumstances. As upper-income families move into new houses there will be a releasing of the pressure from the top downwards. Those at the lower end of the scale will be the last to benefit and if the shortage cannot, in fact, be entirely overcome it will be the low-income families which will be the victims. They have no alternative but to accept the worst housing in the area and when no permanent accommodation is available they must become the tenants of temporary housing. Already there are 4,000 families in emergency accommodation provided by the City of Toronto and by the close of 1947 it is expected that this number will have been increased to 5,000. The most obsolete housing in the city has to be retained in use and continues to command a rental value. So the severity of the shortage has to be measured in terms of human distress arising out of the too close and too constant proximity of children and adults crowded into small quarters and suffering from the humiliations, squalour, ugliness and functional inadequacy of obsolete and temporary buildings. It is for this reason that the ultimate territory on which the community must face its problems of housing shortage is in the slums and blighted areas of the city. The inevitable cycle of housing history brings us back to this.

Since the war we have come to speak of the shortage as "the housing problem"; it has been commonly regarded as a temporarily embarrassing situation to be met with technical improvements in fabrication and in the supply of materials. But before the war what was customarily referred to as "the housing problem" was that unwholesome condition in which a large number of low-income families had to live; this was a problem conveniently remote from the interests of most people in the city. These two "housing problems" have commonly been regarded as of quite a different nature, and to be solved by mechanical means and the other being a matter solely within the province of

health and welfare systems. The fact is, of course, that the two problems are one and the same. Slum conditions are simply the ultimate form of a housing shortage. To state that there are slums, blighted areas and emergency housing in a city is simply another way of saying that there is a shortage of houses of adequate standard.

In Toronto there has been a shortage of houses for a long time, certainly since 1930. The community has met this situation in the second of the three ways mentioned above - by the acceptance of a lower standard of housing and a lower standard of living for some of its citizens. The poorest families have had to occupy the most undesirable housing and pay the rent that it has commanded even though this has been greatly in excess of their real capacity. Low-income families have habitually had to pay a larger proportion of their incomes for housing accommodation than has been paid by families in easier circumstances. Even if low-income families had paid the same proportion many of them would still have been unable to maintain a standard of living which has received general recognition by this community.

This study started with a statement of the proposition that it must be regarded as the objective of a housing programme to provide a decent dwelling for every family. The crucial and ultimate test of a housing programme's effectiveness is, therefore, the condition of the worst housed families in the community.

The reason that obsolete housing has to be held in circulation is not simply that there are in this community a certain number of families of relatively low income. The origin of this situation is to be found, rather, in the economic impasse higher up the scale where even families of average income cannot buy new houses and so increase the total supply so that, in turn, more contemporary housing could be filtered down to the low-income group. Obviously

the most effective and economical way of providing the community with an adequate supply of decent accomodation is through the economic market for new housing. If those who can afford to own or to rent new housing could maintain such a volume of production that every family could be well-housed and obsolete housing could be successively removed, then in the process of time there would be no housing problem. All the resources of science and industry must be applied to the removal of the obstructions at the point where, in a free economy, the bulk of the housing supply should be concentrated - at the mid-point in the income scale. Unless a balance in the ratio between incomes and costs can be established the shortage will continue to stack up against families in the lower-income ranges. Unhappily any study of the economic factors involved seems to lead inevitably to the conclusion that a balance of incomes and housing costs is unlikely to be established at a level which would produce an adequate supply of housing. If this conclusion is well founded we are compelled to adopt the third of the approaches which have been mentioned above; it becomes necessary to devise a means whereby a larger proportion of the community's total income may be directed into the production of housing. It will be necessary to supplement the supply of housing created by the private market. Such a conclusion introduces problems of an administrative nature involving the establishment of public housing Authorities and the operation of rental subsidies such as have been described in the preceding Chapter.

Under the social and economic conditions characteristic of a society such as ours, the recourse to public housing seems to be an expedient which cannot be avoided in filling out a community's housing programme. In the Toronto area it is already in operation in the administration of Emergency Housing, in the projects of Wartime Housing Limited and in the Regent Park project shortly to be begun by the Toronto Housing Authority. Before the post-

war housing programme is much further advanced it seems inescapable that there will be much public discussion as to the future extent and the permanency of public housing. (In discussions of this subject it is found that some are born "public housers" and their views on the matter are blurred by an emotional aura, some have public housing thrust upon them reluctantly and refuse to accept it as more than an emergency measure. Too few are able to achieve a rational view of this element in a community's housing programme). No amount of statistical research and no authoritative dogmatic pronouncements can specify the extent to which public housing should be taken, because no one can foresee the extent to which the private market will succeed in fulfilling the community's needs. Both in providing additional housing in the suburban areas and in effecting replacements within the city the potentialities of the private builder must be pushed to their limits. Even if building costs cannot be revolutionized it is still possible that greatly improved architectural design and neighbourhood planning may uncover a market that has not yet been exploited. There is something seriously wrong with the contemporary product of the building industry when so many people are willing to pay more than \$10,000 for used houses more than 20 years old. It is not at all foolish to imagine that well-planned estates containing small, efficient houses of sophisticated design grouped in a pleasant setting at prices from \$7,000 to \$10,000 would attract many upper-income families who are at present not at all interested in the crude products of the speculative builder. An opportunity to develop such estates is now offered by the new legislation entitling the insurance companies to finance land improvements in suburban areas; with the co-operation of the local Planning Boards there is, for the first time, an opportunity to plan whole neighbourhood units, control their architectural and landscape design and bring them to completion in an orderly and logical fashion. Though the widening of the

housing market by such means will not eliminate the need for some form of public housing, yet its influence in maintaining a steady volume of supply will certainly moderate the pressure on middle and low income families.

It has been suggested here that the amount of obsolete housing which has been allowed to accumulate within the city and the mounting numbers of families housed in emergency accomodation together represent a backlog of residential construction which cannot now be cleared by the supply coming in from the private housing market. If this is a correct analysis of the situation the application of a suitable remedy will depend upon the intensity of feeling with which the public looks upon these facts. It is at this point that any discussion of housing must leave the objective field of economics and statistics and enter upon the philosophical field of emotions and persuasions. Here the operative economy of the state comes face to face with the whole modern fabric of social health and welfare and the concepts and traditions on which this fabric is built. It becomes clear that ultimately the solution to the central problem of housing involves the forming of opinions and ethical attitudes concerning the rights and equities within our society. For if it is not considered important that every adult and every child in a Canadian community should be able to enjoy a certain way of life, then there is no housing problem.

T A B L E 1

RELATIONS BETWEEN HEALTH AND HOUSING CONDITIONS. TORONTO 1934	
<u>Incidence of Tuberculosis</u>	
In Good Housing areas the incidence was 25 per 10,000 population	
Poor	37
Worst	64
<u>Infant Mortality Rate</u>	
In Good Housing areas the rate was 58.3 per 1,000 living births	
Poor	72.6
Worst	121.2
<u>Juvenile Delinquency Rate</u>	
In Good Housing areas the rate was 7.9 cases per 10,000 population	
Poor	27.6
Worst	36.6

Source: Report of the Lieutenant Governor's Committee on Housing in Toronto 1934.

T A B L E 2

COSTS OF MUNICIPAL SERVICES IN GOOD AND POOR HOUSING AREAS. TORONTO 1946		
	REGENT PARK DISTRICT	NORTH END DISTRICT
Expenses of		
Fire Department	\$35,524.50	\$9,521.80
Welfare Department	46,479.56	2,309.92
Street Cleaning Department	5,100.00	4,900.00
Health Department	7,200.00	3,000.00
Buildings Department	801.00	116.00
	<hr/>	<hr/>
Totals	\$95,105.06	\$19,847.72
Revenue from taxation	\$31,965.49	\$83,153.52

Source: Special Report of Municipal Departments to Board of Control 1946.

TABLE 3

RECORDED CHANGES IN HEALTH OF POPULATION
MOVED FROM SLUM CONDITIONS TO MODERN HOUSING

	IN SLUM AREA	IN MODERN HOUSING	IN WHOLE CITY
# <u>LIVERPOOL, England 1918-1920</u>			
Death-rate per 1,000	37.0	26.6	18.0
Deaths from T.B.	4.0	1.9	1.7
Infant Mortality Rate	259	162	119
# <u>LIVERPOOL, England 1923-1924</u>			
Death-rate per 1,000	28.4	18.2	13.9
Deaths from T.B. per 10,000	299	164	123
Infant Mortality Rate	177	131	98
## <u>NEWARK, N.J. 1942-1943</u>			
T.B. per 10,000 ages 15-40	58.8	29.2	
Infant Mortality Rate	41.5	34.7	
Communicable Diseases, under 15	158.1	114.2	
## <u>PHILADELPHIA, Penn. 1943</u>			
T.B. Death-rate per 1,000	5.98	.33	
Pneumonia death-rate per 1,000	5.86	.33	

Source:

Handbook For Research in the Social Aspects of Housing
United States Housing Authority, November 1941.

The Cost of Slums in Newark. Housing Authority, City of Newark, 1946.

T A B L E 4

INCREASES OF POPULATION AND HOUSING 1931-1945 TORONTO METROPOLITAN AREA

	(A) Increase in population 1931-1945	(B) Increase in Housing Units 1931-1945	Ratio of (A) to (B) Number of Persons Per Unit
TORONTO city	60,278	8,052	7.4
FOREST HILL vill.	9,421	2,405	3.91
LEASIDE tn.	9,234	2,866	3.22
LONG BRANCH vill.	1,683	410	4.10
MIMICO tn.	2,957	654	4.52
NEW TORONTO tn.	3,863	(600)	#6.43
SWANSEA vill.	2,749	694	3.96
WESTON tn.	1,731	504	3.43
SCARBOROUGH twp.	7,270	2,132	3.31
YORK twp.	22,546	4,602	4.89
EAST YORK twp.	14,217	3,778	3.76
NORTH YORK twp.	15,446	4,926	3.13
ETOBICOKE twp.	<u>12,203</u>	<u>3,562</u>	3.56
TOTALS			
SUBURBAN			
MUNICIPALITIES	103,320	27,815	3.71
METROPOLITAN AREA	163,598	35,867	4.56

#Records for residential construction in New Toronto are only available from 1937, and it is not therefore possible to present valid figures for this ratio. There are reasons for believing that this approximation is not far from the truth.

Source: Humphrey Carver "How Much Housing Does Greater Toronto Need?"

T A B L E 5

SUB-STANDARD DWELLINGS IN CANADIAN CITIES AS RECORDED BY THE 1941 CENSUS

Dwellings in need of external repair and / or lacking or with shared use
of flush toilets and bathing facilities.

	Number of Dwellings	Percentage of all Dwellings in the City
TORONTO	42,226	29
MONTREAL	54,375	27
VANCOUVER	19,571	27
WINNIPEG	17,821	36
QUEBEC	12,230	45
HAMILTON	11,275	28
EDMONTON	10,787	46
CALGARY	8,300	38
OTTAWA	8,176	25
WINDSOR	7,887	31
LONDON	6,811	33
REGINA	6,618	43
HALIFAX	5,836	43
SAINT JOHN	5,575	46

Source: Adgisory Committee on Reconstruction Report IV "Housing and
Community Planning" March 1944 and Dominion Bureau of Statistics
1941 Census.

T A B L E 6

PROGRESS OF HOUSING PROGRAMME TORONTO METROPOLITAN AREA 1931-1946				
	VALUE OF RESIDENTIAL CONTRACTS AWARDED	NUMBER OF NEW UNITS		
		CITY	SUBURBS	METROPOLITAN AREA
1931		1,639	1,746	3,385
1932		192	786	978
1933		220	601	821
1934	\$10,846,900	295	798	1,093
1935	11,963,800	570	1,011	1,581
1936	13,036,700	369	1,565	1,934
1937	14,049,900	618	1,442	2,060
1938	13,210,500	627	1,384	1,911
1939	15,435,000	458	2,518	2,976
1940	14,930,600	524	2,781	3,305
1941	15,476,400	356	3,264	3,620
1942	13,819,800	495	2,201	2,696
1943	14,713,400	633	1,823	2,456
1944	20,865,400	476	2,396	2,872
1945	26,011,300	879	2,654	3,533
1946	25,105,100	417	4,030	4,447

Sources:

- (1) Value of Residential Contracts awarded from MacLean Building Reports Ltd.
- (2) Number of New Units 1931-1944 from records of the Municipalities in the area. See "How Much Housing Does Greater Toronto Need?"
- (3) Number of New Units Completed 1945 and 1946 from Housing Statistics published by the Dominion Bureau of Statistics.

T A B L E 7

COSTS OF BUILDING MATERIALS AND OF LIVING IN CANADA			
		COST OF BUILDING MATERIALS (1935-1939= 100)	COST OF LIVING (1935-1939=100)
1945	First Quarter	145.3	118.6
	Second	144.6	119.1
	Third	144.4	120.3
	Fourth	144.6	119.9
1946	First Quarter	145.8	120.0
	Second	152.6	122.1
	Third	152.9	125.4
	Fourth	158.7	127.0
1947	First Quarter	171.1	127.9
	Second	(173.4)	(132.0)

Source: "Housing in Canada" Vol. 2, No. 2, April 1947.

T A B L E 8

	RESIDENTIAL CONSTRUCTION \$	TOTAL (ALL FORMS OF CONSTRUCTION) \$	RESIDENTIAL AS PERCENTAGE OF TTOAL %
1934	10,846,900	20,150,700	53
1935	11,963,800	22,618,500	53
1936	13,036,700	21,358,200	60
1937	14,049,900	22,112,000	56
1938	13,210,500	24,485,900	57
1939	15,435,000	24,485,900	63
1940	14,930,600	29,403,100	51
1941	15,476,400	32,142,900	47
1942	13,819,800	24,036,100	57
1943	14,713,400	24,066,800	61
1944	20,865,400	36,580,700	57
1945	26,011,300	50,169,500	52
1946	25,105,100	75,974,700	33

Source: MacLean's Building Reports Limited.

T A B L E 9

TYPES OF RESIDENTIAL ACCOMODATION BUILT IN THE TORONTO METROPOLITAN AREA
DURING 1945 AND 1946

TYPE OF ACCOMODATION	1945	1946	TOTAL	PERCENT
Single Dwelling	2,727	3,869	6,596)	89.7%
Semi-detached or Double	354	130	484)	
Row or Terrace	8	5	13)	
Duplex	6	28	34)	3.4%
Triplex	-	3	3)	
Apartment or Flat	49	13	62)	
Apartment with business premises	14	156	170)	
Conversions and Reconversions	300	243	543	6.9%
TOTAL	3,458	4,447	7,905	100%

Source: Housing Statistics published by the Dominion Bureau of
Statistics.

T A B L E 10

TYPE OF CONSTRUCTION USED ALL HOUSING COMPLETED IN TORONTO METROPOLITAN
AREA 1945 AND 1946

TYPE OF HOUSING BY MATERIALS USED	PERCENTAGE OF ALL HOUSING CONSTRUCTED	
<hr/>		
SINGLE FAMILY HOUSES		
a. Wood frame with wood siding or shingles	25.5	per cent
b. Wood frame and brick veneer	2.0	
c. Cinder or cement blocks and stucco	2.1	
d. Brick facing and masonry blocks	22.6	
e. Solid brick	<u>30.4</u>	82.6 per cent
MULTIPLE UNIT HOUSES		
a. Wood frame with siding or shingles	1.7	
b. Brick facing and masonry blocks	2.4	
c. Solid brick	<u>4.3</u>	8.4
CONVERSIONS		6.6
OTHER		<u>2.4</u>
		100.0 per cent

Source: Housing Statistics published by the Dominion Bureau of
Statistics.

T A B L E 11

AMOUNTS AND VALUES OF MATERIALS REQUIRED IN THE CONSTRUCTION OF ONE REPRESENTATIVE DWELLING UNIT, SINGLE-UNIT HOUSE TYPE WITH WOOD FRAME AND WOOD SIDING, TORONTO, 1947.

KIND OF BUILDING MATERIALS USED	TYPE OF UNIT OF MATERIAL	COST PER UNIT OF MATERIAL	NUMBER OF UNITS	VALUE
		\$		\$
I.				
<u>Cement, Gravel, and Sand</u>				
1. Cement	Bags (4)	3.15	250	196.88
2. Aggregates for concrete	Cu. yds.	3.90	56	218.40
3. Concrete blocks	Number			
Sub-total				<u>415.28</u>
II.				
<u>Bricks, Tile and Stone</u>				
1. Bricks for chimneys	No.	27.00 M	1,000	27.00
2. Brick for exterior walls	No.			
3. Field tile sub-drainage	Ft.	.24	180	43.20
4. Vitrified flue linings	Ft.	.36	50	18.00
				<u>88.20</u>
III.				
<u>Lumber and its Products</u>				
1. Structural (dimension) lumber	B.M. ft.	69.00 M	6,400	441.60
2. Yard lumber, rough and surfaced	B.M. ft.	73.00 M	6,000	438.00
3. Wood clapboard for exterior walls	Sq. ft.	83.50 M	1,800	150.30
4. Exterior millwork: doors, windows, porch frames, cornices	B.M. ft.	206.00 M	1,200	247.20
5. Floorings: hardwood	B.M. ft.	137.00 M	750	102.75
6. Floorings: softwood	B.M. ft.	94.00 M	750	70.50
7. Interior millwork: doors, doors and window trim, baseboards	B.M. ft.	237.00 M	920	218.04
8. Interior millwork: kitchen cupboards	B.M. ft.		80	123.60
9. Strapping	L. ft.			
Sub-total				<u>1,791.99</u>

T A B L E 11 (CONT'D)

AMOUNTS AND VALUES OF MATERIALS REQUIRED IN THE CONSTRUCTION OF ONE REPRESENTATIVE DWELLING UNIT, SINGLE-UNIT HOUSE TYPE WITH WOOD FRAME AND WOOD SIDING, TORONTO, 1947.

KIND OF BUILDING MATERIALS USED	TYPE OF UNIT OF MATERIAL	COST PER UNIT OF MATERIAL	NUMBER OF UNITS	VALUE
		\$		\$
IV.				
<u>Lath, Plaster and Insulation Materials</u>				
1. Rock Wool	Sq. ft.	6.35 C	2,100	133.35
2. Interior plaster, on gypsum, fibre board or wood lath	Sq. yds.	.66	400	264.00
3. Building paper, inside	Rolls	2.82	7	19.74
4. Building paper, outside	Rolls	2.47	8	19.76
5. Exterior plaster - stucco	Sq. yds.			
Sub-total				<u>436.85</u>
V.				
<u>Roofing Materials</u>				
1. Shingles	Squares	7.30	15	109.50
2. Dry felt, 20 yr. proof	Rolls			
3. Tar felt	Rolls			
4. Pitch	Lbs.			
5. Gravel	Tons			
Sub-total				<u>109.50</u>
VI.				
<u>Paint and Glass</u>				<u>132.00</u>
VII.				
<u>Plumbing Equipment and Fixtures</u>				<u>300.00</u>
VIII.				
<u>Heating Equipment and Fixtures</u>				<u>250.00</u>
IX.				
<u>Electrical Equipment and Fixtures</u>				<u>139.00</u>
X.				
<u>Other Materials</u>				<u>194.00</u>
Total				<u><u>3,856.82</u></u>

T A B L E 12

AMOUNTS AND VALUES OF MATERIALS REQUIRED IN THE CONSTRUCTION OF ONE REPRESENTATIVE DWELLING UNIT, SINGLE-UNIT HOUSE TYPE WITH SOLID BRICK, TORONTO, 1947.

KIND OF BUILDING MATERIALS USED	TYPE OF UNIT OF MATERIAL	COST PER UNIT OF MATERIAL	NUMBER OF UNITS	VALUE
		\$		\$
I.				
<u>Cement, Gravel, and Sand</u>				
1. Cement	Bags (4)	3.15	250	196.88
2. Aggregate for concrete	Cu. yds.	3.90	56	218.40
3. Concrete blocks	Number			
Sub-total				<u>415.28</u>
II.				
<u>Bricks, Tile and Stone</u>				
1. Bricks for chimneys	No.	27.00 M	1,000	27.00
2. Bricks for exterior walls	No.	33.00 M	22,000	726.00
3. Field tile sub-drainage	Ft.	.24	180	43.20
4. Vitrified flue linings	Ft.	.36	50	18.00
Sub-total				<u>814.20</u>
III.				
<u>Lumber and its Products</u>				
1. Structural (dimension) lumber	B.M. ft.	72.00 M	5,000	360.00
2. Yard Lumber, rough and surfaced	B.M. ft.	73.00 M	4,300	313.90
3. Wood clapboard for exterior walls	Sq. ft.			
4. Exterior millwork: doors, windows, porch frames, cornices	B.M. ft.	206.00 M	1,700	350.20
5. Floorings: hardwood	B.M. ft.	137.00 M	750	102.75
6. Floorings: softwood	B.M. ft.	94.00 M	750	70.50
7. Interior millwork: doors, doors and window trim, baseboards	B.M. ft.	237.00 M	920	218.04
8. Interior millwork: kitchen cupboards	B.M. ft.		80	123.60
9. Strapping	L. ft.	1.10 C	400	4.40
Sub-total				<u>1,543.39</u>

T A B L E 12 (CONT'D)

AMOUNTS AND VALUES OF MATERIALS REQUIRED IN THE CONSTRUCTION OF ONE REPRESENTATIVE DWELLING UNIT, SINGLE-UNIT HOUSE TYPE WITH SOLID BRICK, TORONTO, 1947.

KIND OF BUILDING MATERIALS USED	TYPE OF UNIT OF MATERIAL	COST PER UNIT OF MATERIAL	NUMBER OF UNITS	VALUE
		\$		\$
IV. <u>Lath, Plaster and Foundation Materials</u>				
1. Rock wool	Sq. ft.	6.35 C	650	41.28
2. Interior plaster, on gypsum, fibre board or wood lath	Sq. yds.	.66	400	264.00
3. Building paper, inside	Rolls			
4. Building paper, outside	Rolls			
5. Exterior plaster-- stucco	Sq. yds.			
Sub-total				<u>305.28</u>
V. <u>Roofing Materials</u>				
1. Shingles	Squares	7.30	15	109.50
2. Dry felt, 20 yr. proof	Rolls			
3. Tar felt	Rolls			
4. Pitch	Lbs.			
5. Gravel	Tons			
Sub-total				<u>109.50</u>
VI. <u>Paint and Glass</u>				<u>107.00</u>
VII. <u>Plumbing and Equipment and Fixtures</u>				<u>300.00</u>
VIII. <u>Heating Equipment and Fixtures</u>				<u>250.00</u>
IX. <u>Electrical Equipment and Fixtures</u>				<u>154.50</u>
X. <u>Other Materials</u>				<u>216.50</u>
Total				<u><u>4,215.65</u></u>

T A B L E 13A

COMPONENT COSTS OF CONSTRUCTING DWELLINGS

Based on Costs of Materials in Toronto, January 1947 and assuming Materials, Labour and Overhead to be in the proportions of 50, 35 and 15 per cent respectively.

Types of Dwelling Unit: SINGLE FAMILY HOUSE

- (a) Wood frame with siding
- (b) Wood frame with brick veneer
- (c) Masonry blocks and stucco
- (d) Masonry blocks with brick facing
- (e) Solid brick

MULTIPLE UNIT DWELLING

- (f) Wood frame with siding
- (g) Masonry blocks with brick facing
- (h) Solid brick

DWELLING TYPE	COST OF MATERIALS 50%	COST OF LABOUR 35%	COST OF OVERHEAD 15%	TOTAL 100%
(a)	\$3,856	\$2,699	\$1,157	\$7,713
(b)	4,049	2,834	1,214	8,093
(c)	3,821	2,675	1,146	7,643
(d)	4,175	2,922	1,252	8,350
(e)	4,215	2,950	1,264	8,431
(f)	2,880	2,016	864	5,760
(g)	2,872	2,011	861	5,745
(h)	2,903	2,032	871	5,807

Source: Based on materials' specifications in "Manpower and Material Requirements for a Housing Program in Canada" with prices for the Toronto area January 1947.

T A B L E 13B

COMPONENT COSTS OF CONSTRUCTING DWELLINGS

Based on Costs of Materials in Toronto, January 1947 and assuming Materials, Labour and Overhead to be in the proportions of 52.5, 27.5 and 10 per cent respectively.

Types of Dwelling Unit: SINGLE FAMILY HOUSE

- (a) Wood frame with siding
- (b) Wood frame with brick veneer
- (c) Masonry blocks and stucco
- (d) Masonry blocks with brick facing
- (e) Solid brick

MULTIPLE UNIT DWELLING

- (f) Wood frame with siding
- (g) Masonry blocks with brick facing
- (h) Solid brick

DWELLING TYPE	COST OF MATERIALS 52.5%	COST OF LABOUR 37%	COST OF OVERHEAD 10%	TOTAL 100%
(a)	\$3,856	\$2,754	\$734	\$7,344
(b)	4,049	2,892	771	7,712
(c)	3,821	2,729	728	7,278
(d)	4,175	2,982	795	7,952
(e)	4,215	3,051	802	8,028
(f)	2,880	2,057	548	5,485
(g)	2,872	2,053	547	5,472
(h)	2,903	2,074	552	5,529

Source: Based on materials' specifications in "Manpower and Material Requirements for a Housing Program in Canada" with prices for the Toronto area January 1947.

T A B L E 14

 DISTRIBUTION OF
 INCOMES OF FAMILIES IN THE TORONTO METROPOLITAN AREA - 1941

Annual Income \$	Estimated Number of Families	Percentage Of All Families
6,000 and over	4,080	2.0 per cent
5,000 - 6,000	2,856	1.4 " "
4,000 - 5,000	6,528	3.2 " "
3,000 - 4,000	18,360	9.0 " "
2,500 - 3,000	17,544	8.6 " "
2,000 - 2,500	31,212	15.3 " "
1,500 - 2,000	46,308	22.7 " "
1,000 - 1,500	51,408	25.2 " "
500 - 1,000	18,360	9.0 " "
0 - 500	7,344	3.6 " "
TOTAL	204,000	100.0 per cent

Source: 1941 Census.

T A B L E 15

ESTIMATED DISTRIBUTION OF INCOME - TAXPAYERS ONTARIO 1946

Annual Income \$	Percentage of Taxpayers
6,000 and over	7.7
5,000 - 6,000	2.4
4,000 - 5,000	6.7
3,000 - 4,000	15.8
2,500 - 3,000	8.3
2,000 - 2,500	16.9
1,500 - 2,000	17.4
1,000 - 1,500	16.1
Below 1,000	<u>8.7</u>
	100.0 per cent

Source: Derived from figures supplied by the Department of National Revenue, Taxation Division, July 1947.

T A B L E 16

RENT CAPACITY OF FAMILIES IN THE TORONTO METROPOLITAN AREA - 1941

Monthly Income \$	Amount Available For Rent \$	Percentage of All Families
500.00 and over	100.00 and over	2.0 per cent
416.66 - 500.00	83.33 - 100.00	1.4 " "
333.33 - 416.66	66.66 - 88.33	3.2 " "
250.00 - 333.33	50.00 - 66.66	9.0 " "
208.33 - 250.00	41.66 - 50.00	8.6 " "
166.66 - 208.33	33.33 - 41.66	15.3 " "
125.00 - 166.66	25.00 - 33.33	22.7 " "
83.33 - 125.00	16.66 - 25.00	25.2 " "
41.66 - 83.33	8.33 - 16.66	9.0 " "
0 - 41.66	0 - 8.33	3.6 " "
		100.0 per cent

"Amount available for Rent" is based on the assumption that 20% of income is available to pay for housing accomodation.

Source: 1941 Census.

T A B L E 17

RENTS PAID BY LOW-INCOME FAMILIES COMPARED WITH THEORETICAL CAPACITY - 1941

Metropolitan Areas	Average Rent Paid By All Low Income Families \$	Rent Capacity (20% of Income) \$	Deviation of Actual Rent From Proportionate Rent \$
TORONTO	25	13.77	11.23
HALIFAX	18	12.25	5.75
SAINT JOHN	14	9.65	4.35
QUEBEC	17	10.20	6.80
MONTREAL	17	10.87	6.13
OTTAWA	19	12.67	6.33
HAMILTON	21	14.43	6.57
LONDON	20	12.92	7.08
WINDSOR	21	15.72	5.28
WINNIPEG	18	10.23	7.77
VANCOUVER	18	9.57	8.43
VICTORIA	19	11.68	7.32
<hr/>			
Averages of twelve Metropolitan Areas \$ 19		\$ 11.72	\$ 7.28

Source: Report of the Subcommittee on "Housing and Community Planning",
Advisory Committee on Reconstruction, Ottawa 1944.

T A B L E 18

RENTS PAID BY MIDDLE-INCOME FAMILIES COMPARED WITH THEORETICAL CAPACITY - 1941

Metropolitan Areas	Average Rent Paid by Middle Income Families \$	Rent Capacity (20% of Income) \$	Deviation of Actual Rent From Proportionate Rent \$
TORONTO	29	25.82	3.18
HALIFAX	26	22.85	3.15
SAINT JOHN	18	19.48	1.48
QUEBEC	22	20.47	1.53
MONTREAL	21	22.05	1.05
OTTAWA	28	25.97	2.03
HAMILTON	25	24.70	0.30
LONDON	25	22.65	2.35
WINDSOR	24	27.78	3.78
WINNIPEG	26	22.57	3.43
VANCOUVER	22	21.45	0.55
VICTORIA	22	21.57	0.43
Average of Twelve Metropolitan Areas	24	23.15	0.85

Source: Report of the Subcommittee on "Housing and Community Planning",
Advisory Committee on Reconstruction, Ottawa 1944.

T A B L E 19

MONTHLY RENTS PAID, IN RELATION WITH SIZE OF FAMILY, 1941
TORONTO CITY, SUBURBAN AREA AND WHOLE METROPOLITAN AREA

				AVERAGE RENT PAID IN THE		
				CITY	FRINGE	METROPOLITAN
				AREA	AREA	AREA
				\$	\$	\$
In the \$1,500 - \$2,000 income group						
Families with no children				35	34	35
"	"	2	"	32	28	31
"	"	4	"	28	26	28
In the \$1,000 - \$1,500 income group						
Families with no children				31	28	30
"	"	2	"	28	23	26
"	"	4	"	26	21	24
In the \$500 - \$1,000 income group						
Families with no children				29	25	27
"	"	2	"	26	20	24
"	"	4	"	24	20	23

Source: 1941 Census. Derived from detailed statistics specially prepared for this study by the Dominion Bureau of Statistics.

T A B L E 20

PERCENTAGES OF TENANT FAMILIES PAYING MORE THAN PROPORTIONATE RENT,
AT THREE INCOME LEVELS AND THREE FAMILY SIZES - TORONTO AREA

PERCENTAGE PAYING MORE THAN 20% OF INCOME			
	CITY	FRINGE	METROPOLITAN AREA
	%	%	%
\$1,500 - \$2,000 Income group			
With no children	74.4	69.1	72.5
" 2 "	57.7	38.2	52.2
" 4 "	36.6	32.7	35.6
\$1,000 - \$1,500 Income group			
With no children	88.0	73.7	83.9
" 2 "	80.2	63.8	73.4
" 4 "	73.5	45.5	64.3
\$500 - \$1,000 Income group			
With no children	86.2	87.1	86.5
" 2 "	96.2	80.4	91.6
" 4 "	98.4	83.3	94.2

Source: 1941 Census. Derived from detailed statistics specially prepared for this study by the Dominion Bureau of Statistics.

T A B L E 21

MONTHLY BUDGET FOR FAMILY OF FIVE IN TORONTO (MAN, WOMAN, BOY 6, GIRL 10, BOY 12)

ITEM	COST		
	1939	1944	May 1947
RENT	\$ 25.00	\$ 30.00	\$ 33.00
FOOD			
Man		\$13.00	\$14.79
Woman		11.60	13.24
Boy 6		7.60	8.90
Girl 10		10.55	12.69
Boy 12		<u>10.55</u>	<u>12.69</u>
	34.40	53.30	62.31
CLOTHING			
Man		6.40	7.72
Woman		6.00	6.94
Boy 6		3.05	3.46
Girl 10		4.15	4.94
Boy 12		<u>4.50</u>	<u>5.22</u>
	19.18	24.10	28.28
OPERATION			
Coal		7.75	8.92
Gas		2.70	2.90
Light		1.08	1.08
Water		.90	.90
Ice		1.00	1.00
Cleaning supplies		1.50	1.75
Replacements		2.50	3.00
Carfare		<u>3.50</u>	<u>3.50</u>
	22.00	20.93	23.05
ADVANCEMENT AND RECREATION	6.00	11.50	11.50
MEDICAL AND DENTAL CARE	7.45	9.00	9.00
SAVINGS AND INSURANCE	7.91	5.34	5.34
TOTAL PER MONTH	\$121.94	\$154.17	\$172.48
TOTAL PER WEEK	\$ 28.35	\$ 35.85	\$ 40.11

Source: Community Chest of Greater Toronto, Research Department.

T A B L E 22

NET FAMILY INCOMES AFTER DEDUCTION OF INCOME TAX AND ADDITION OF FAMILY ALLOWANCES

<u>GROSS INCOME</u>	<u>NO CHILDREN</u>	<u>ONE CHILD</u>	<u>TWO CHILDREN</u>	<u>THREE CHILDREN</u>	<u>FOUR CHILDREN</u>	<u>FIVE CHILDREN</u>
\$3,000	2,639	2,707	2,784	2,866	2,943	3,016
\$2,750	2,463	2,530	2,608	2,691	2,769	2,847
\$2,500	2,278	2,347	2,424	2,506	2,583	2,657
\$2,400	2,209	2,276	2,354	2,438	2,516	2,594
\$2,300	2,138	2,204	2,282	2,368	2,447	2,527
\$2,200	2,062	2,128	2,206	2,291	2,370	2,449
\$2,100	1,985	2,052	2,130	2,215	2,293	2,372
\$2,000	1,909	1,976	2,054	2,138	2,216	2,294
\$1,900	1,833	1,900	1,978	2,061	2,140	2,215
\$1,800	1,755	1,823	1,901	1,983	2,060	2,135
\$1,700	1,671	1,741	1,817	1,897	1,973	2,044
\$1,600	1,592	1,662	1,739	1,818	1,894	1,959
\$1,500	1,500	1,574	1,649	1,723	1,797	1,859
\$1,400	1,400	1,474	1,549	1,623	1,697	1,759
\$1,300	1,300	1,374	1,449	1,523	1,597	1,659
\$1,200	1,200	1,274	1,349	1,423	1,497	1,559
\$1,100	1,100	1,174	1,249	1,323	1,397	1,459
\$1,000	1,000	1,074	1,149	1,223	1,297	1,359
\$ 900	900	974	1,049	1,123	1,197	1,259
\$ 800	800	874	949	1,023	1,097	1,159
\$ 700	700	774	849	923	997	1,059

Income tax adjustments have been made on the basis of the tax applicable in 1947 for the payment of 1946 taxes.

T A B L E 23

NET MONTHLY RENT CAPACITY AS ONE FIFTH OF NET INCOME,
STANDARD OF LIVING MARGIN AND RESIDUAL RENT CAPACITY

PROPORTIONATE RENT PER SIZE OF FAMILY

GROSS INCOME	NO CHILDREN	ONE CHILD	TWO CHILDREN	THREE CHILDREN	FOUR CHILDREN	FIVE CHILDREN
\$	\$	\$	\$	\$	\$	\$
3,000	44	45	46	47	49	50
2,750	41	42	43	45	46	47
2,500	38	39	40	42	43	44 (37)
2,400	37	38	39	41	42	43 (33)
2,300	36	37	38	39	41	42 (28)
2,200	34	35	37	38	40 (36)	41 (21)
2,100	33	34	36	37	38 (30)	40 (15)
2,000	32	33	34	36	37 (24)	38 (8)
1,900	31	32	33	34 (33)	36 (17)	37 (1)
1,800	29	30	32	33 (25)	34 (10)	36 (0)
1,700	28	29	30	32 (19)	33 (3)	34 -
1,600	27	28	29 (28)	30 (12)	32 (0)	33 -
1,500	25	26	27 (20)	29 (4)	30 -	31 -
1,400	23	25	26 (12)	27 (0)	28 -	29 -
1,300	22	23 (17)	24 (4)	25 -	27 -	28 -
1,200	20	21 (9)	22 (0)	24 -	25 -	26 -
1,100	18	20 (0)	21 -	22 -	23 -	24 -
1,000	17 (9)	18 (0)	19 -	20 -	22 -	23 -
900	15 (1)	16 -	17 -	19 -	20 -	21 -
800	13 (0)	15 -	16 -	17 -	18 -	19 -
700	12 -	13 -	14 -	15 -	17 -	18 -

The heavy stepped line represents the minimum income levels at which families of various sizes are able to pay one fifth of income for rent and also meet the 1947 costs of maintaining the standard of living defined by the Toronto Welfare Council.

The figures in brackets below the standard line represent the monthly income remaining after all costs of living except rent have been paid.

T A B L E 24

TORONTO METROPOLITAN FAMILIES: PERCENTAGE FREQUENCY BY INCOME AND FAMILY SIZE

INCOME LEVELS	S I Z E O F F A M I L Y						
	Two	Three	Four	Five	Six	Seven	Eight
	Members %	Members %	Members %	Members %	Members %	Members %	Members %
\$6,000	.18	.39	.68	.43	.25	.07	.03
\$5,000 - 5,999	.17	.22	.37	.36	.19	.08	.02
\$4,000 - 4,999	.47	.64	.76	.55	.32	.17	.26
\$3,000 - 3,999	1.46	2.09	2.36	1.66	.81	.28	.31
\$2,500 - 2,999	1.45	2.22	2.34	1.22	.72	.42	.25
\$2,000 - 2,499	2.99	4.62	3.75	1.93	1.16	.44	.38
\$1,500 - 1,999	5.60	6.33	5.37	2.83	1.47	.54	.63
\$1,000 - 1,499	6.33	6.80	6.16	2.87	1.74	.63	.67
\$500 - 999	2.30	2.32	2.03	.95	.62	.43	.30
\$000 - 499	1.00	.83	.70	.39	.32	.17	.17

Source: 1941 Census. Derived from detailed statistics specially prepared for this study by the Dominion Bureau of Statistics.

T A B L E 25

DISTRIBUTION OF TORONTO METROPOLITAN FAMILIES ON THE BASIS OF A TOTAL
OF 200,000 FAMILIES

INCOME LEVELS	S I Z E O F F A M I L Y						
	Two Members	Three Members	Four Members	Five Members	Six Members	Seven Members	Eight Members
\$6,000	360	780	1,360	860	500	140	60
\$5,000 - 5,999	340	440	740	720	380	160	40
\$4,000 - 4,999	940	1,280	1,520	1,100	640	340	520
\$3,000 - 3,999	2,920	4,180	4,720	3,320	1,620	560	620
\$2,500 - 2,999	2,900	4,440	4,680	2,440	1,440	840	500
\$2,000 - 2,499	5,980	9,240	7,500	3,860	2,320	880	760
\$1,500 - 1,999	11,200	12,660	10,740	5,660	2,940	1,080	1,260
\$1,000 - 1,499	12,660	13,600	12,320	5,740	3,480	1,260	1,340
\$500 - 999	4,600	4,640	4,060	1,900	1,240	860	600
\$000 - 499	2,000	1,660	1,400	780	640	340	340

Source: 1941 Census. Derived from detailed statistics specially prepared for this study by the Dominion Bureau of Statistics.

T A B L E 26

NATIONAL INCOME, BUILDING COSTS, AND VOLUME OF RESIDENTIAL CONSTRUCTION
CANADA, 1919 - 1941.

(1926 = 100)

	National Income	Building Costs	Volume of Residential Construction
1919	84.7	116.2	36.8
1920	102.	123.2	40.6
1921	77.8	110.	63.6
1922	81.4	101.1	93.5
1923	85.3	103.8	85.8
1924	85.8	102.2	80.9
1925	94.	100.8	86.6
1926	100.	100.0	100.0
1927	105.2	94.5	120.3
1928	116.9	103	122.7
1929	117.0	107.5	109.1
1930	98.8	105.4	80.2
1931	79.4	98.9	75.4
1932	62.4	91.3	28.9
1933	60.4	85.6	25.5
1934	69.8	86.5	32.6
1935	74.8	87.5	37.4
1936	85.	89.7	43.6
1937	96.9	95.3	53.4
1938	95.1	94.1	53.1
1939	101.4	94.8	64.3
1940	119.6	98.8	62.6
1941	142.5	107.3	77.9

T A B L E 27

EXAMPLES OF RENT SYSTEMS USED BY LOCAL HOUSING AUTHORITIES, U.S.A.

CHICAGO HOUSING AUTHORITY

Yearly Family Income	2 Rooms	3 Rooms	4 Rooms	5 Rooms
Under \$900	\$15	\$15	\$16	\$17
From \$900 to \$1,200	20	20	21	22
\$1,200 to \$1,500	25	25	26	27
\$1,500 to \$1,800	30	30	31	32
\$1,800 to \$2,100	30	35	36	37
\$2,100 to \$2,400	30	35	41	42
\$2,400 to \$2,700	30	35	45	47
\$2,700 to \$3,000	30	35	45	47

HOUSING AUTHORITY OF CITY OF NEWARK, N.J.

Annual Income Limits and Rent Schedule

2 Persons	3 - 4 Persons	5 or More Persons	Monthly Rent (Including Utilities)
A Up to \$800	Up to \$900	Up to \$1,000	\$19
B \$ 801 - \$1,000	\$ 901 - \$1,125	\$1,000 - \$1,250	\$22
C \$1,000 - \$1,250	\$1,126 - \$1,350	\$1,251 - \$1,450	\$25
D \$1,251 - \$1,350	\$1,351 - \$1,450	\$1,451 - \$1,550	\$28
X \$1,351 - \$1,450	\$1,451 - \$1,550	\$1,551 - \$1,650	\$32

Admission Limits:

\$1,451 - \$1,800	\$1,551 - \$2,000	\$1,651 - \$2,200	#
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#Rents for families whose incomes at admission, or at the time of the annual re-examination for continued occupancy are above those in X grade are figured at \$32 plus \$1.00 for each \$50 by which the annual income exceeds the limits in X grade.